

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102320\
 Data File : VX019083.D
 Acq On : 23 Oct 2020 18:01
 Operator : JC/SP
 Sample : L4490-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 201021073-02-VOA

Manual Integrations
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MMDadoda
 10/26/2020 11:16:17 AM

Quant Time: Oct 26 04:50:10 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X102320W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Oct 26 03:21:29 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.98	128	40036	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.83	114	218617	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	197066	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.03	65	79309	29.74	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	99.13%
60) 4-Bromofluorobenzene	11.12	95	91727	31.01	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	103.37%
63) Toluene-d8	8.70	98	260230	29.91	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.70%

Target Compounds

					Ovalue
4) Vinyl Chloride	1.39	62	1322	0.555 ug/l	# 88
8) Diethyl Ether	2.17	74	5876	3.778 ug/l	95
15) Acetone	2.42	58	35919	133.773 ug/l	96
16) Carbon Disulfide	2.55	76	3133	0.559 ug/l	# 93
22) cis-1,2-Dichloroethene	4.56	96	1735m	0.636 ug/l	
23) tert-Butyl Alcohol	3.00	59	2272734	5001.440 ug/l	# 100
24) Methyl tert-Butyl Ether	3.16	73	18763	2.944 ug/l	94
34) Benzene	6.12	78	41759	4.602 ug/l	96
45) 1,4-Dioxane	7.71	88	5573	122.844 ug/l	92
58) 4-Methyl-2-Pentanone	8.62	43	6231	2.507 ug/l	92
62) Toluene	8.76	91	37088	3.581 ug/l	99
64) Chlorobenzene	10.12	112	8675	1.347 ug/l	92
66) Ethyl Benzene	10.24	91	74272	6.541 ug/l	100
67) m/p-Xylenes	10.34	106	52599	12.146 ug/l	96
68) o-Xylene	10.68	106	31523	7.632 ug/l	99
70) Isopropylbenzene	11.00	105	9917	0.893 ug/l	99
74) n-propylbenzene	11.34	91	3158	0.251 ug/l	96
76) 1,3,5-Trimethylbenzene	11.49	105	10201	1.132 ug/l	99
78) 4-Chlorotoluene	11.49	91	2121	0.254 ug/l	58
80) 1,2,4-Trimethylbenzene	11.79	105	38303	4.276 ug/l	99
82) p-Isopropyltoluene	12.05	119	25442	2.629 ug/l	99
84) 1,4-Dichlorobenzene	12.08	146	26684	5.418 ug/l	96
87) 1,2-Dichlorobenzene	12.37	146	2218	0.478 ug/l	89
91) Naphthalene	13.82	128	168860	15.435 ug/l	99

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

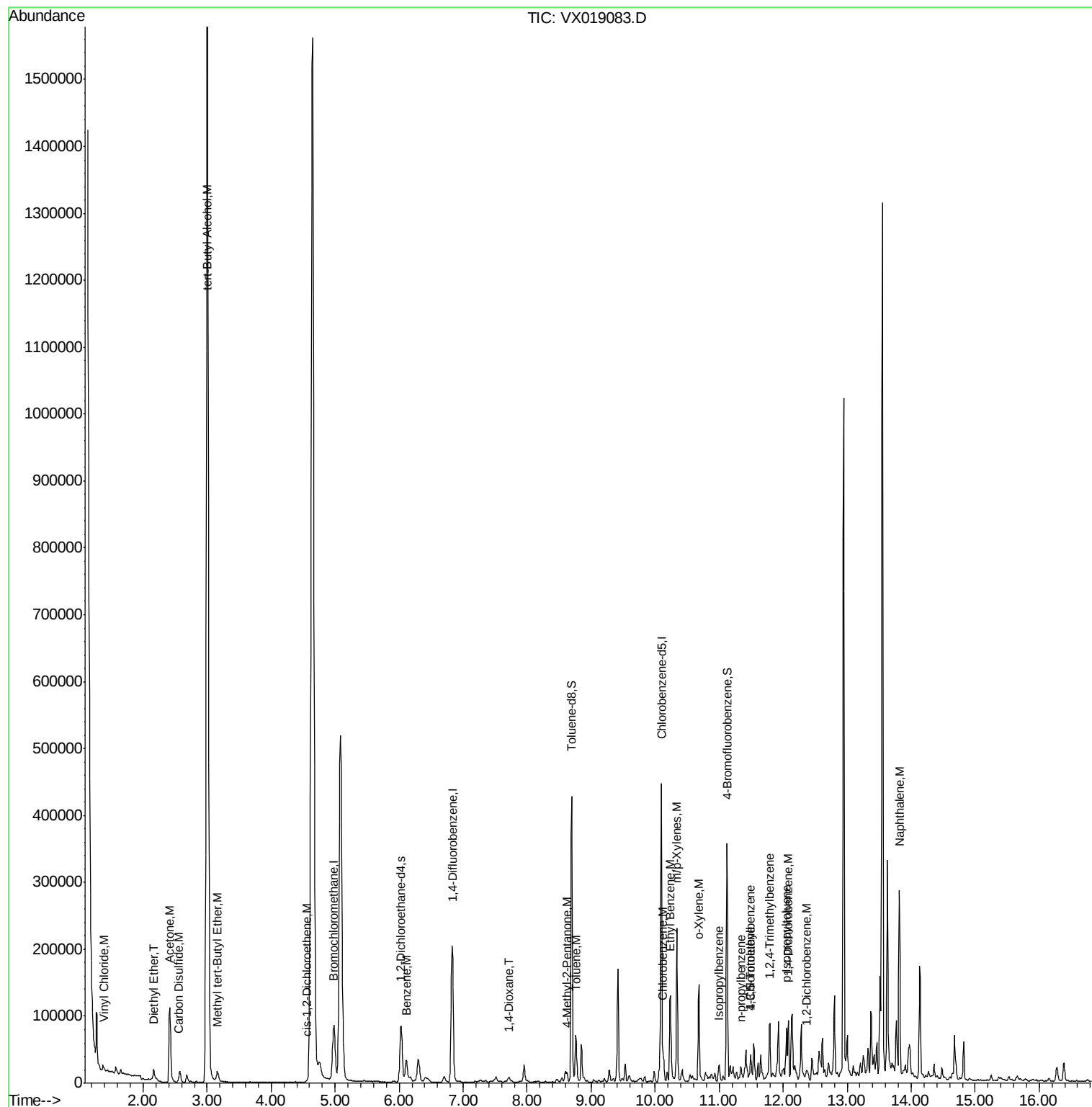
Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102320\
Data File : VX019083.D
Acq On : 23 Oct 2020 18:01
Operator : JC/SP
Sample : L4490-01
Misc : 5.0mL/MSVOA X/WATER
ALS Vial : 18 Sample Multiplier: 1

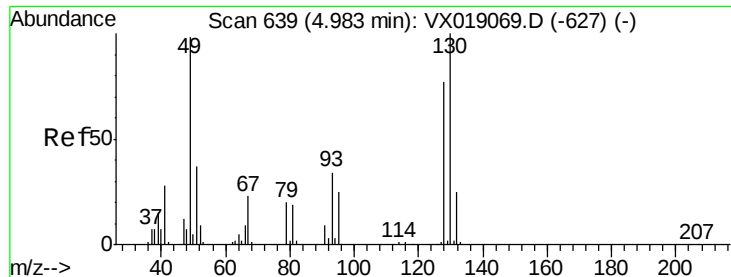
Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

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Quant Time: Oct 26 04:50:10 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X102320W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Mon Oct 26 03:21:29 2020
Response via : Initial Calibration





#1

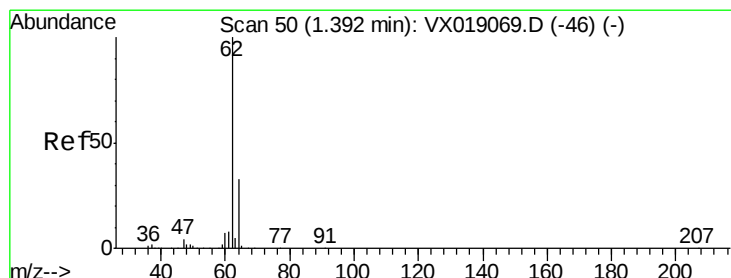
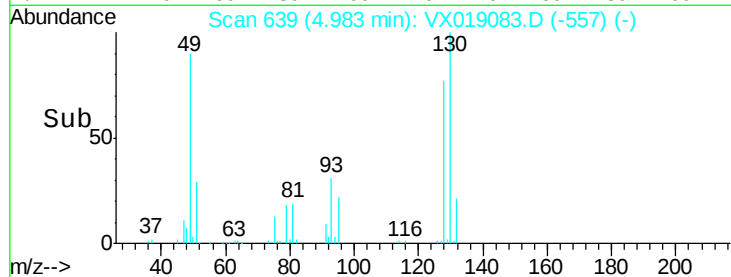
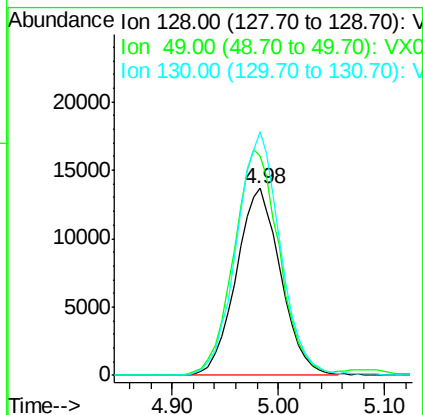
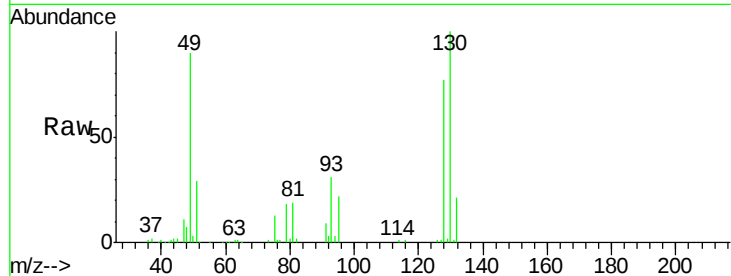
Bromochloromethane
 Concen: 30.000 ug/l
 RT: 4.98 min Scan# 639
 Delta R.T. 0.00 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Instrument :
 MSVOA_X
 ClientSampleId :
 201021073-02-VOA

Tot Ion	Ratio	Lower	Upper
128	100		
49	123.3	0.0	318.8
130	127.8	0.0	321.8

Manual Integrations
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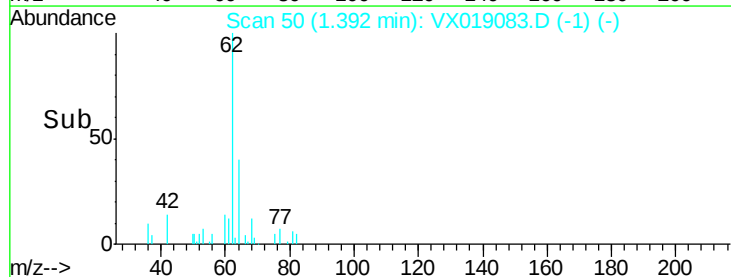
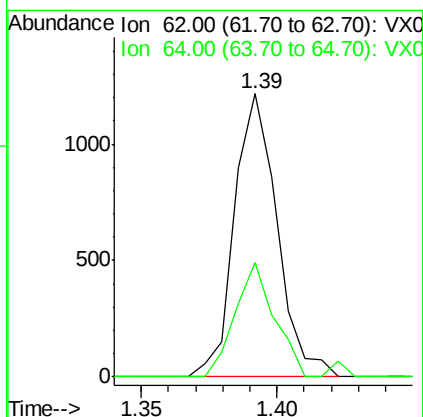
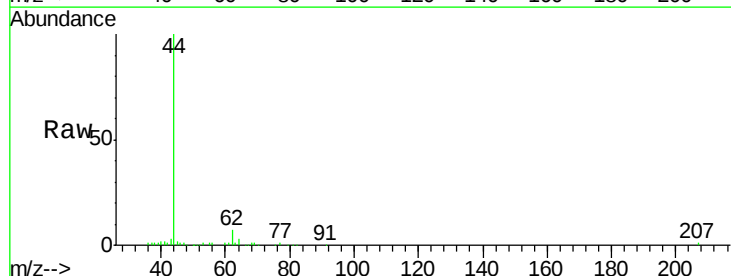
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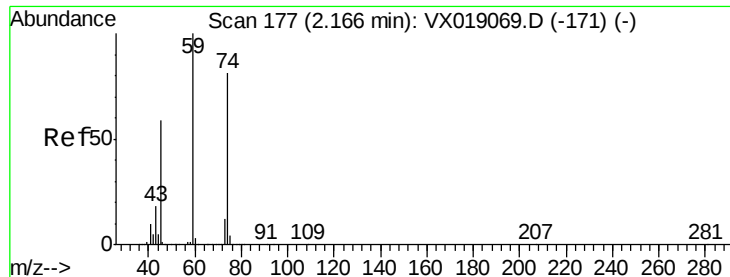


#4

Vinyl Chloride
 Concen: 0.555 ug/l
 RT: 1.39 min Scan# 50
 Delta R.T. 0.00 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Lower	Upper
62	100		
64	40.3	26.7	40.1#





#8

Diethyl Ether

Concen: 3.778 ug/l

RT: 2.17 min Scan# 177

Delta R.T. 0.00 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Instrument :

MSVOA_X

ClientSampleId :

201021073-02-VOA

Tot Ion: 74 Resp: 5876

Ion Ratio Lower Upper

74 100

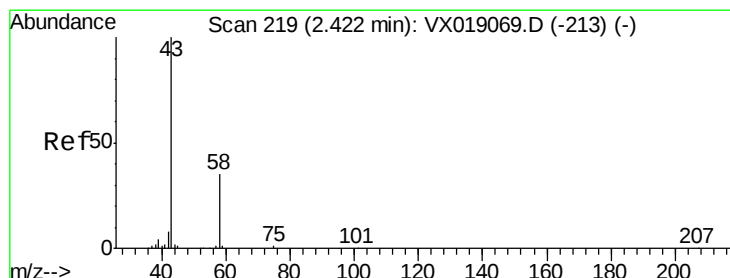
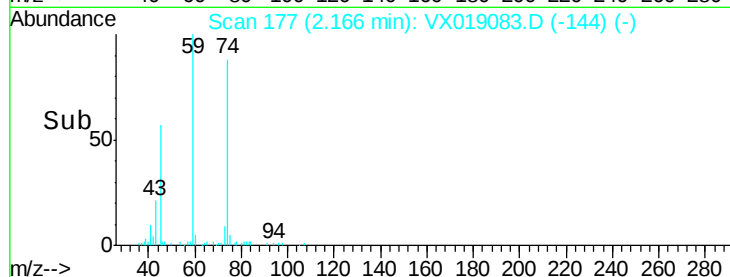
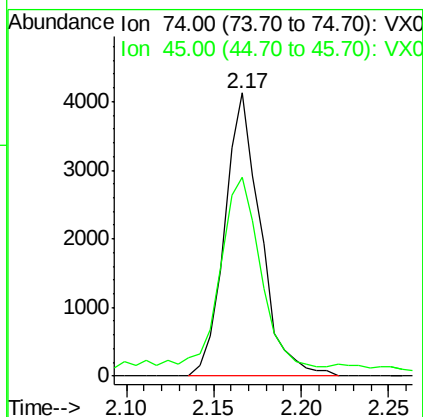
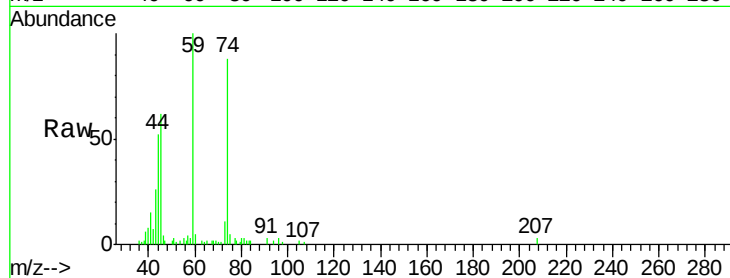
45 76.5 14.5 130.7

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#15

Acetone

Concen: 133.773 ug/l

RT: 2.42 min Scan# 218

Delta R.T. -0.01 min

Lab File: VX019083.D

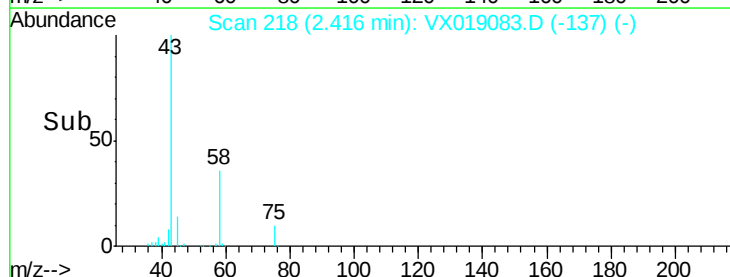
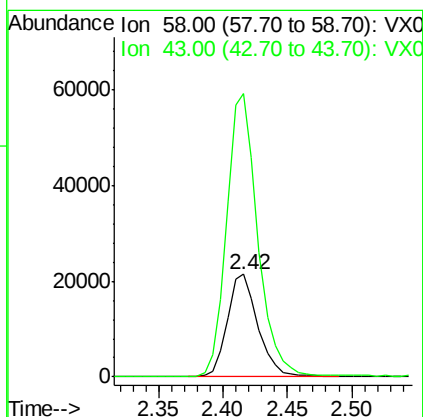
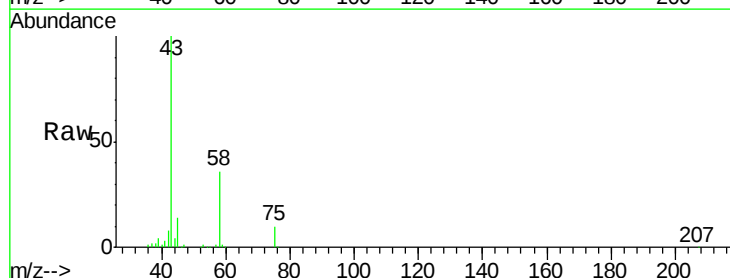
Acq: 23 Oct 2020 18:01

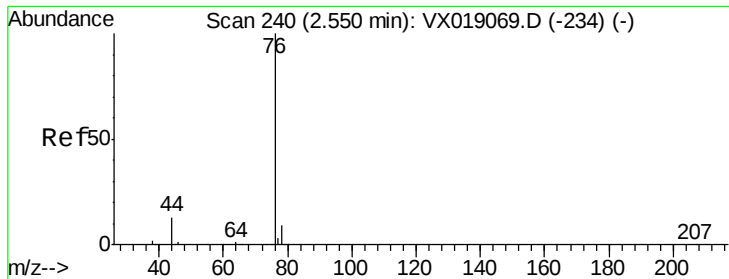
Tgt Ion: 58 Resp: 35919

Ion Ratio Lower Upper

58 100

43 275.7 226.7 340.1





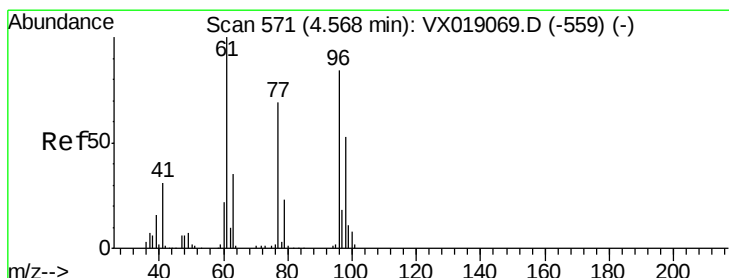
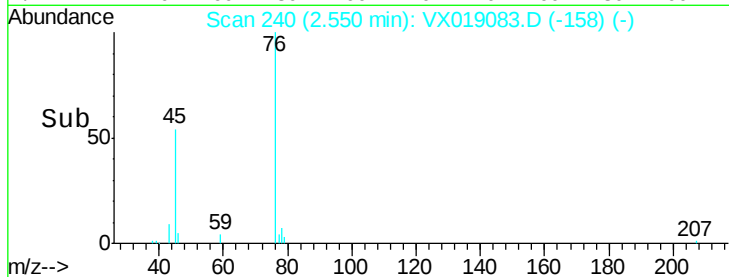
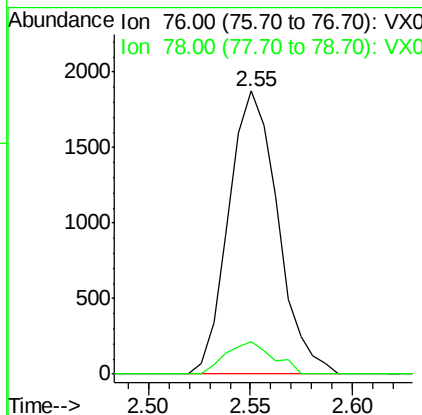
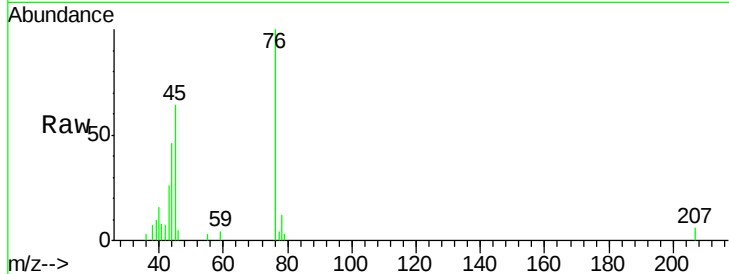
#16
Carbon Disulfide
Concen: 0.559 ug/l
RT: 2.55 min Scan# 240
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

Tot Ion: 76 Resp: 3133
Ion Ratio Lower Upper
76 100
78 11.7 7.2 10.8#

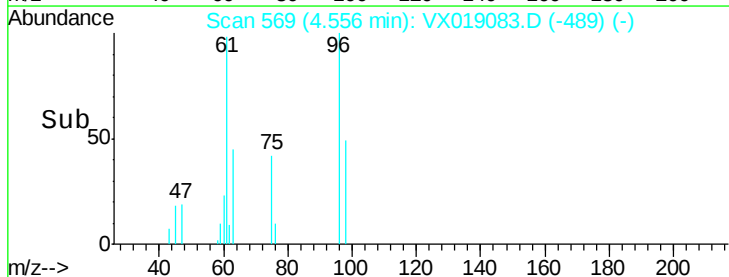
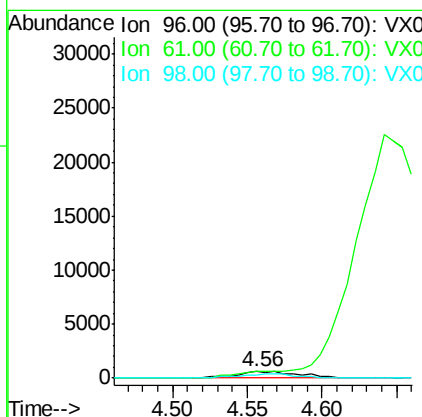
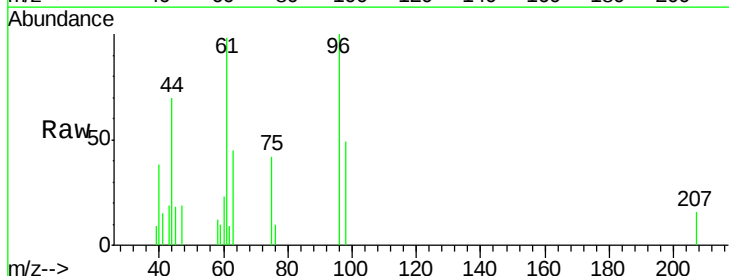
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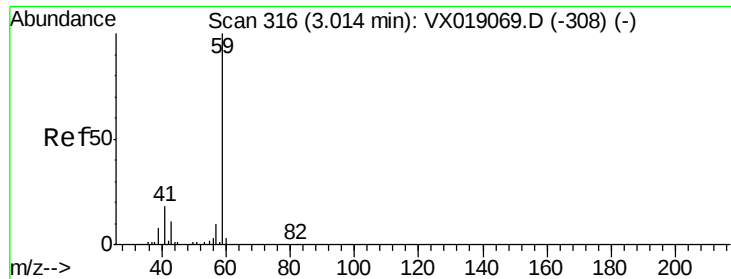
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#22
cis-1,2-Dichloroethene
Concen: 0.636 ug/l m
RT: 4.56 min Scan# 569
Delta R.T. -0.01 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion: 96 Resp: 1735
Ion Ratio Lower Upper
96 100
61 70.3 101.9 152.9#
98 53.0 51.3 76.9





#23

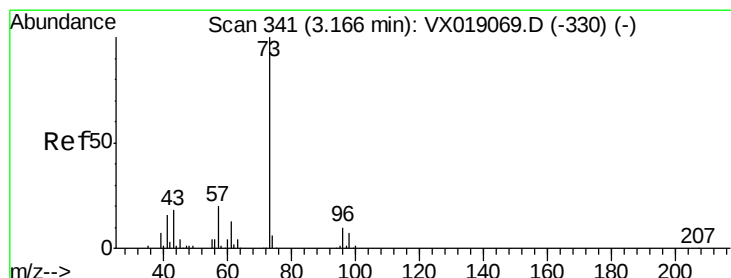
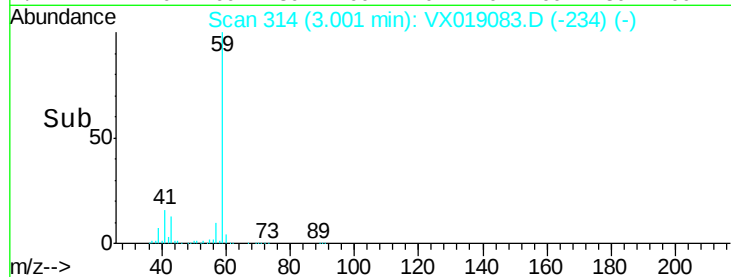
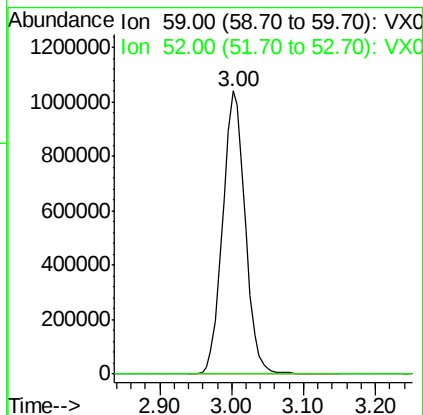
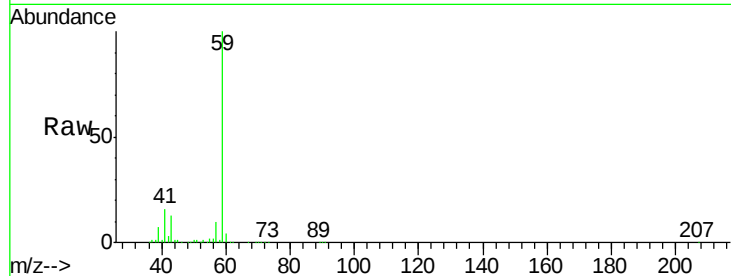
tert-Butyl Alcohol
 Concen: 5001.440 ug/l
 RT: 3.00 min Scan# 314
 Delta R.T. -0.01 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Instrument :
 MSVOA_X
 ClientSampleId :
 201021073-02-VOA

Tot Ion: 59 Resp: 2272734
 Ion Ratio Lower Upper
 59 100
 52 0.2 0.2 0.4#

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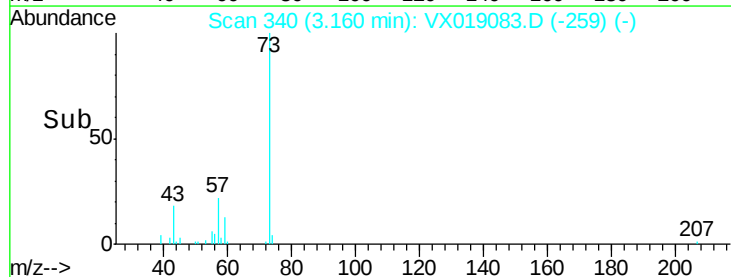
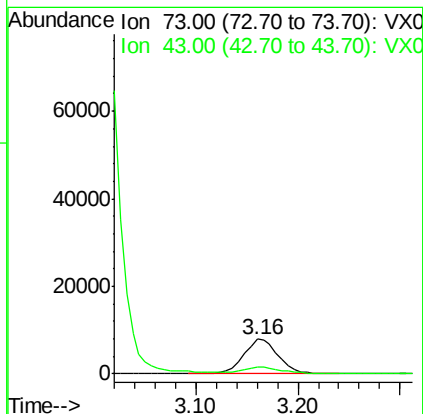
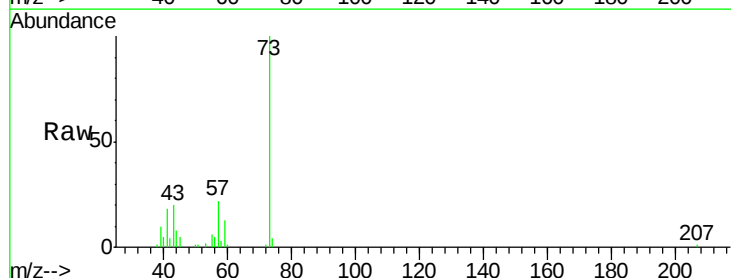
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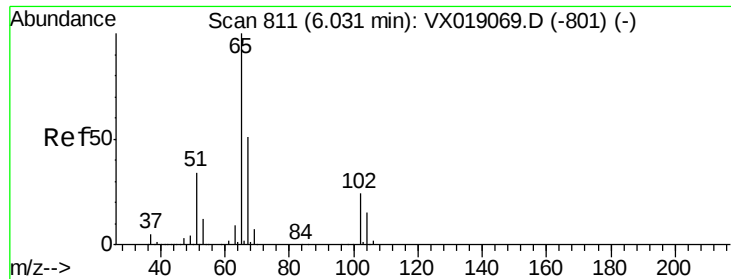


#24

Methyl tert-Butyl Ether
 Concen: 2.944 ug/l
 RT: 3.16 min Scan# 340
 Delta R.T. -0.01 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Tgt Ion: 73 Resp: 18763
 Ion Ratio Lower Upper
 73 100
 43 20.1 13.9 20.9





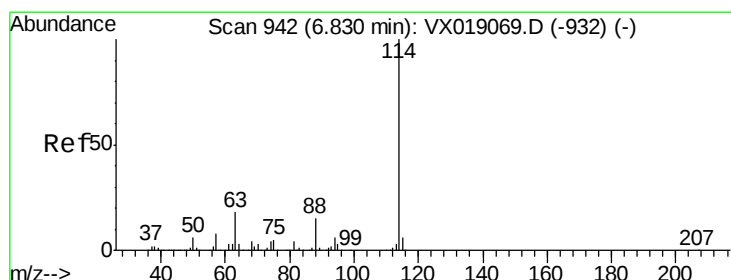
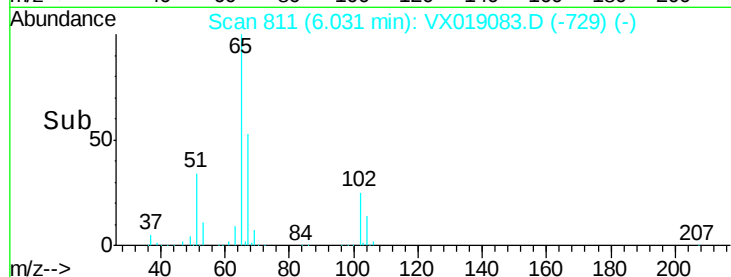
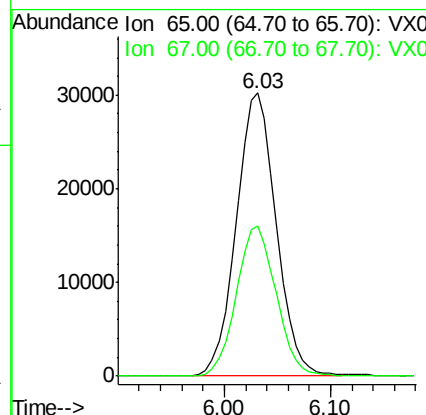
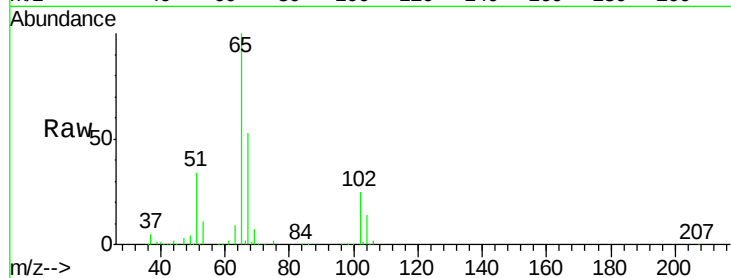
#27
 1,2-Dichloroethane-d4
 Concen: 29.741 ug/l
 RT: 6.03 min Scan# 811
 Delta R.T. 0.00 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Instrument :
 MSVOA_X
 ClientSampleId :
 201021073-02-VOA

Tot Ion	Ratio	Lower	Upper
65	100		
67	53.0	42.0	63.0

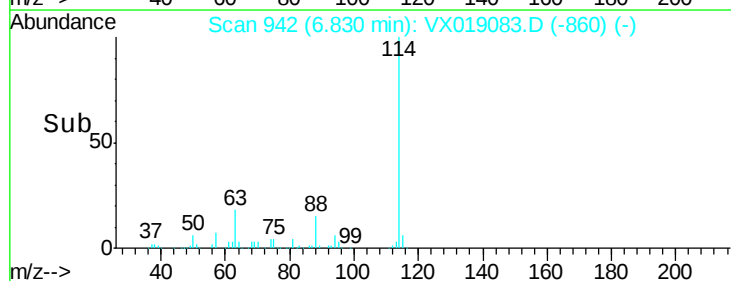
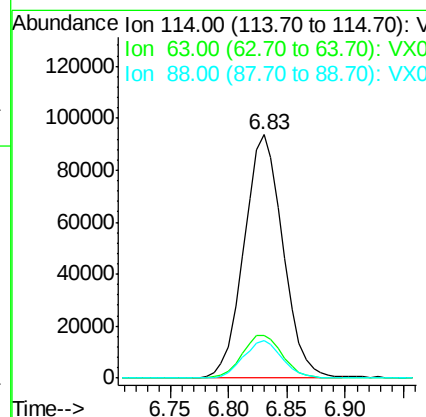
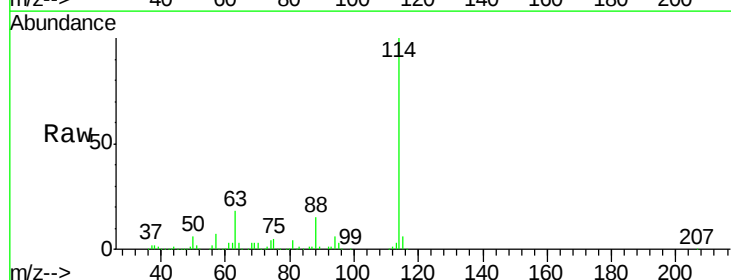
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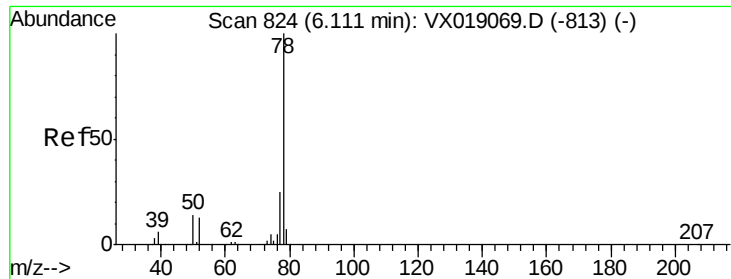
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 10/26/2020 11:16:17 AM



#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.83 min Scan# 942
 Delta R.T. 0.00 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Lower	Upper
114	100		
63	18.3	14.6	21.8
88	15.5	12.2	18.2





#34

Benzene

Concen: 4.602 ug/l

RT: 6.12 min Scan# 825

Delta R.T. 0.01 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Instrument :

MSVOA_X

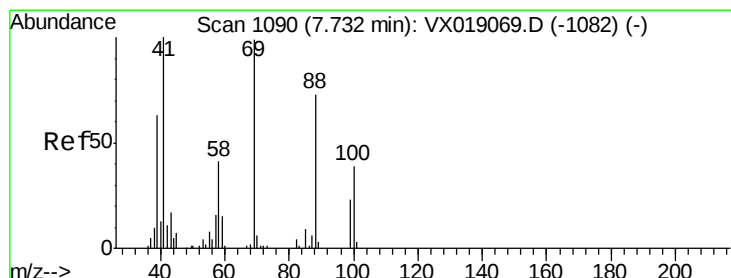
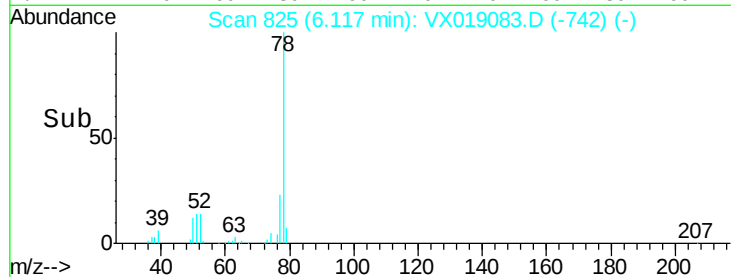
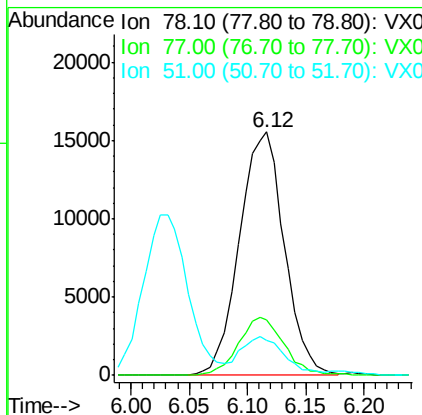
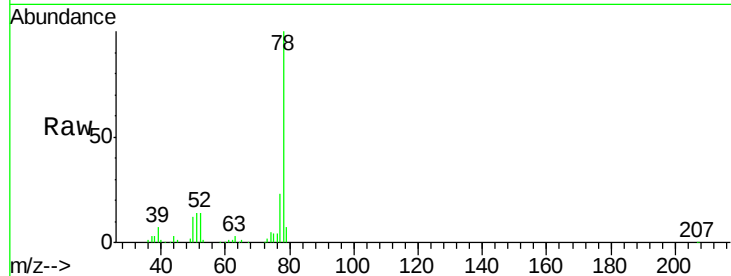
ClientSampleId :

201021073-02-VOA

Tot Ion:	78	Resp:	41759
Ion	Ratio	Lower	Upper
78	100		
77	22.7	20.1	30.1
51	12.7	11.0	16.4

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#45

1,4-Dioxane

Concen: 122.844 ug/l

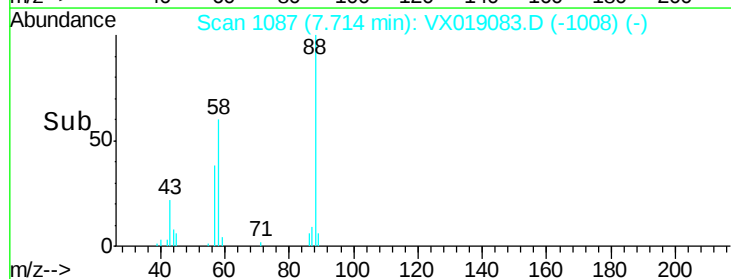
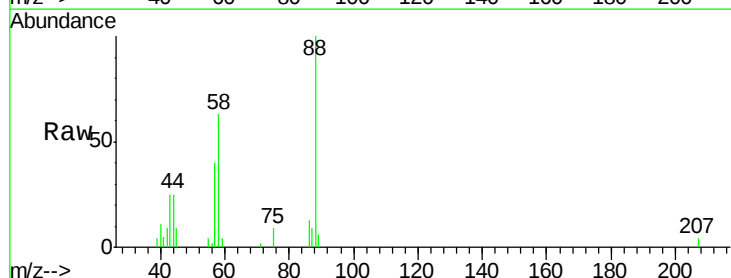
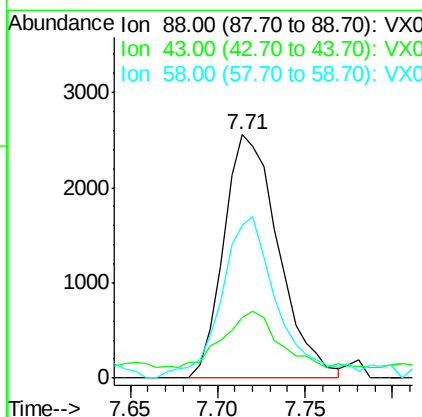
RT: 7.71 min Scan# 1087

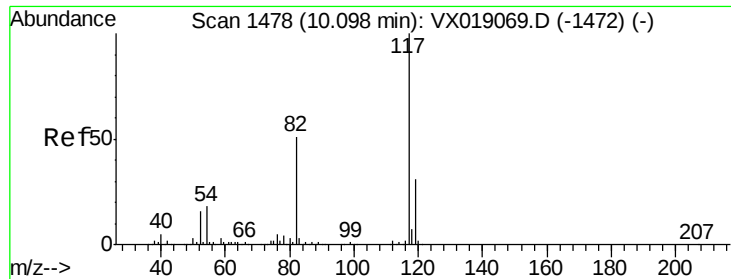
Delta R.T. -0.02 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Tgt Ion:	88	Resp:	5573
Ion	Ratio	Lower	Upper
88	100		
43	23.6	20.5	30.7
58	66.4	47.4	71.2





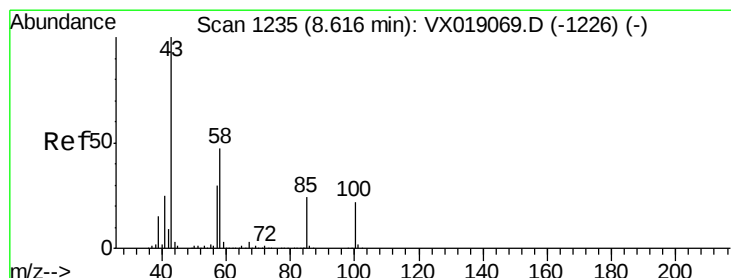
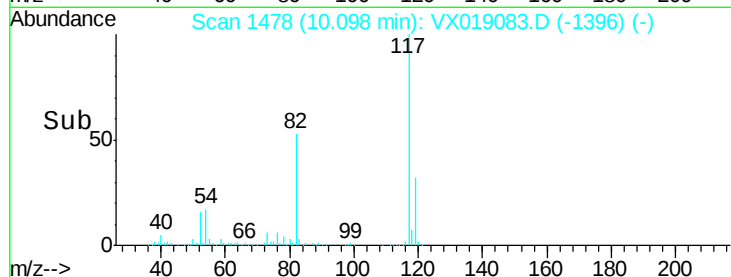
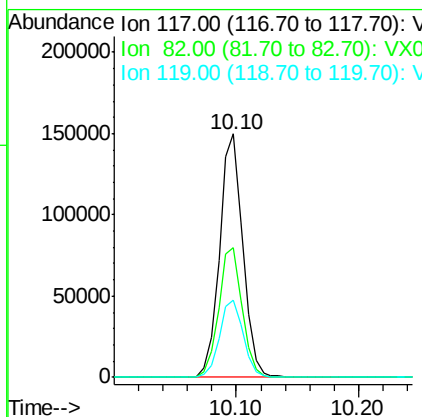
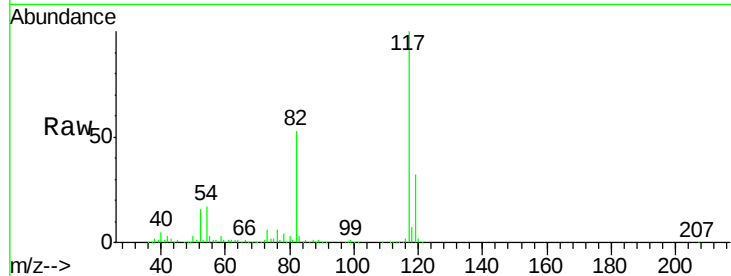
#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.10 min Scan# 1478
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

Tot Ion	Ratio	Resp	Lower	Upper
117	100	197066		
82	54.3	42.5	63.7	
119	32.5	25.6	38.4	

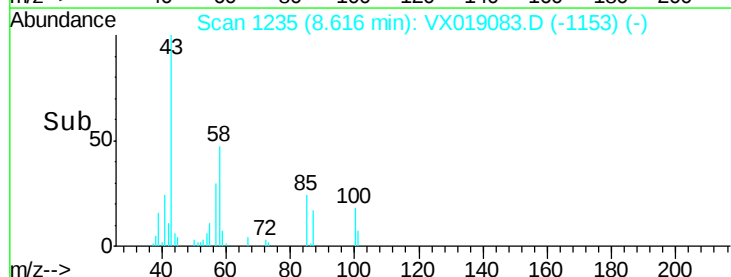
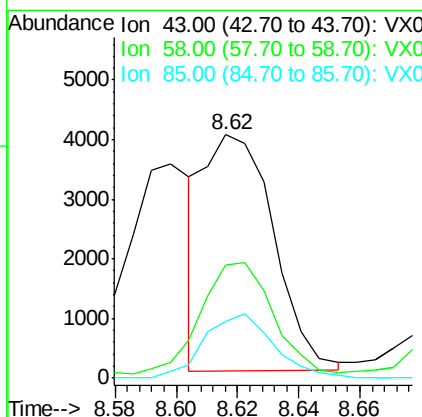
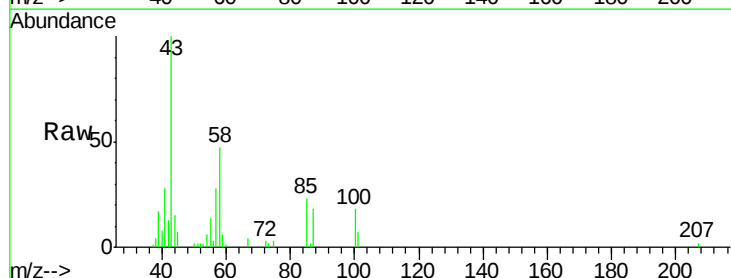
Manual Integrations
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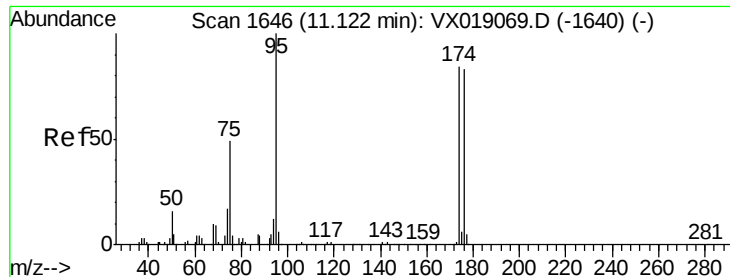
MMDadoda
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#58
4-Methyl-2-Pentanone
Concen: 2.507 ug/l
RT: 8.62 min Scan# 1235
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Resp	Lower	Upper
43	100	6231		
58	53.2	37.6	56.4	
85	27.1	19.4	29.2	





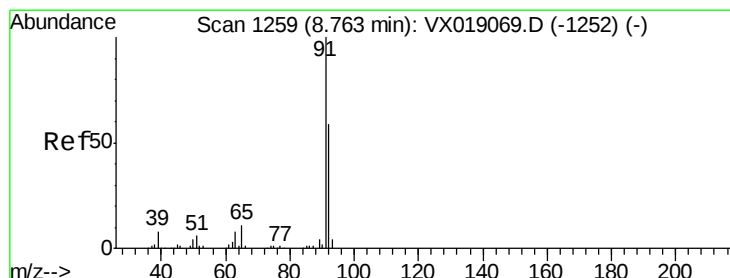
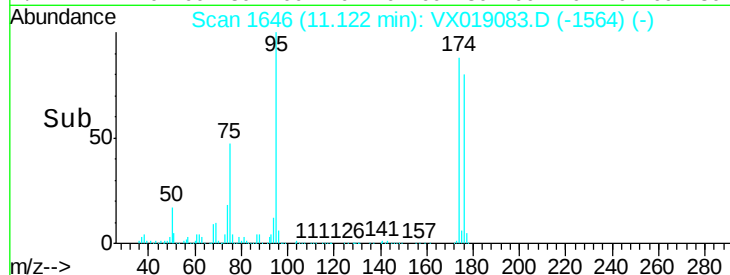
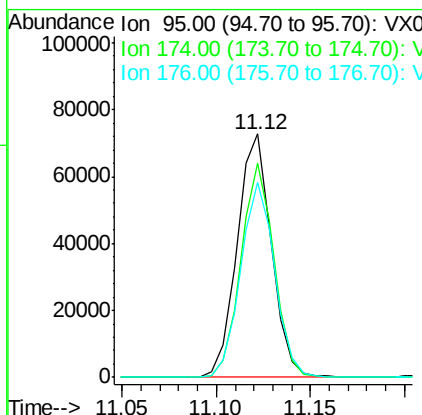
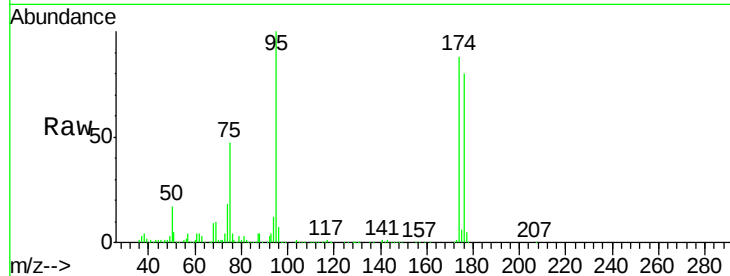
#60
4-Bromofluorobenzene
Concen: 31.012 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

Tot Ion	Ratio	Lower	Upper
95	100		
174	84.6	66.3	99.5
176	79.6	65.5	98.3

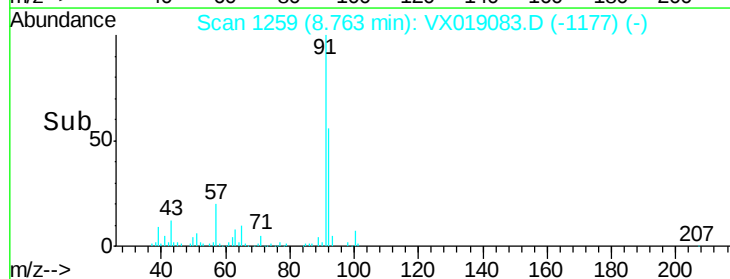
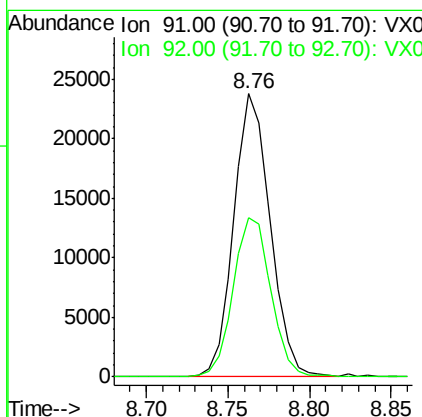
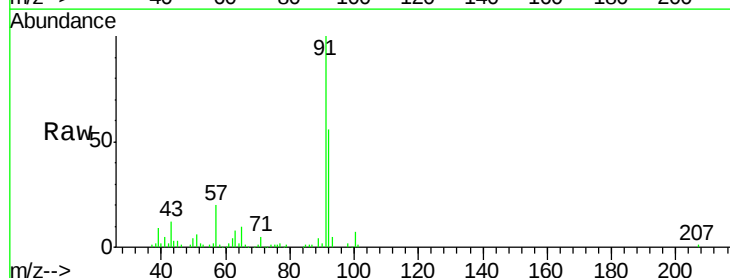
Manual Integrations
APPROVED

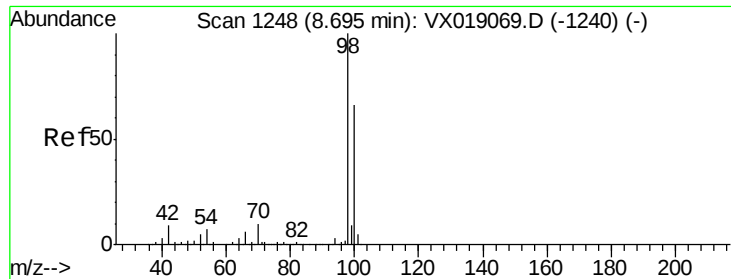
MMDadoda
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#62
Toluene
Concen: 3.581 ug/l
RT: 8.76 min Scan# 1259
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Lower	Upper
91	100		
92	58.1	47.3	70.9





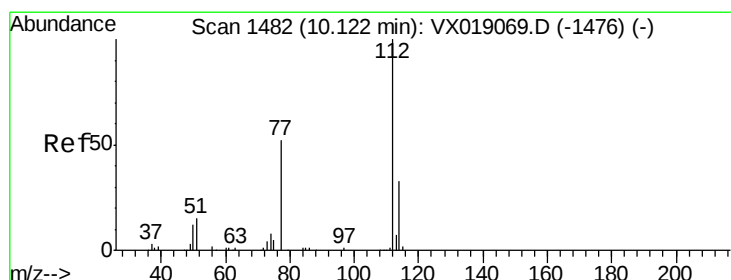
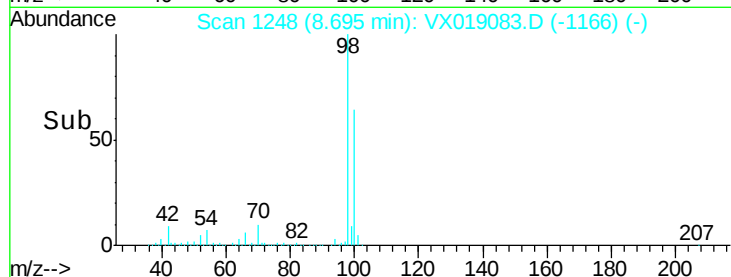
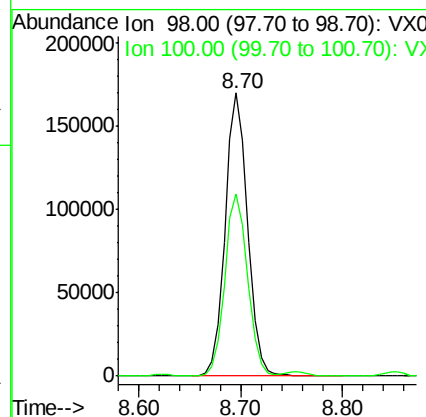
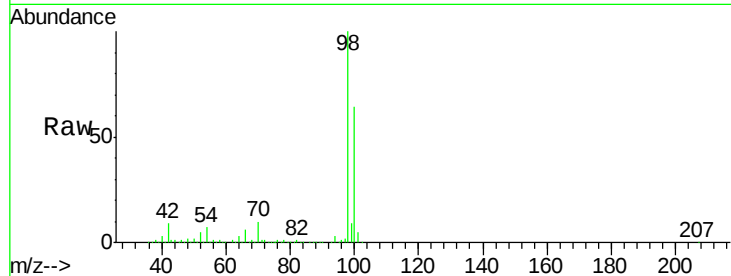
#63
Toluene-d8
Concen: 29.909 ug/l
RT: 8.70 min Scan# 1248
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

Tot Ion: 98 Resp: 260230
Ion Ratio Lower Upper
98 100
100 64.9 52.2 78.4

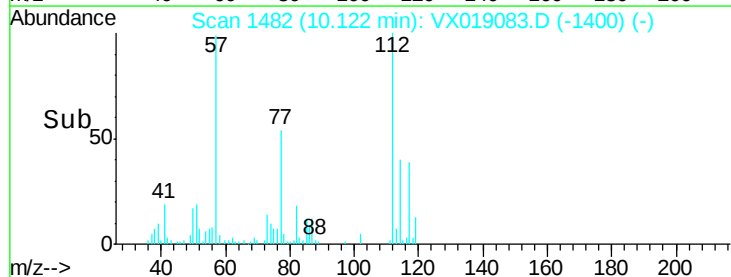
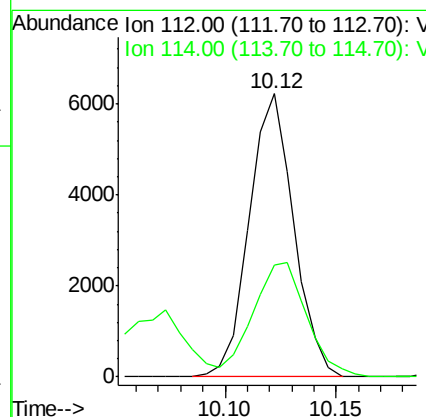
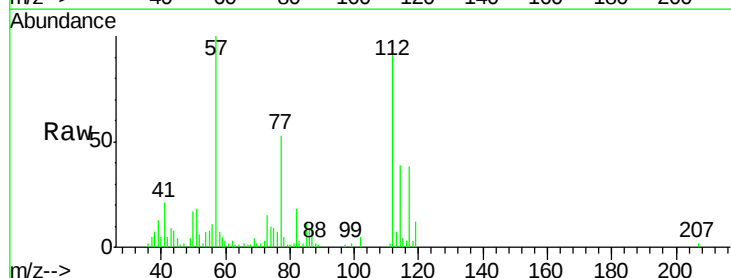
Manual Integrations
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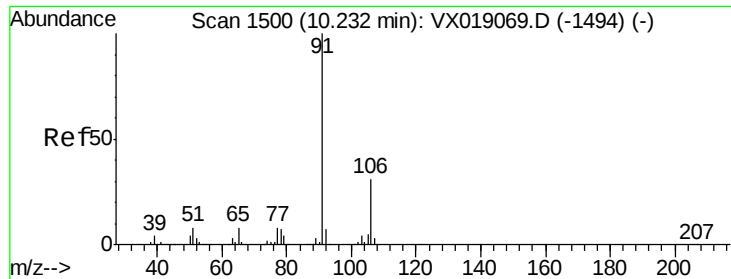
MMDadoda
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#64
Chlorobenzene
Concen: 1.347 ug/l
RT: 10.12 min Scan# 1482
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion: 112 Resp: 8675
Ion Ratio Lower Upper
112 100
114 36.9 26.2 39.2





#66

Ethyl Benzene

Concen: 6.541 ug/l

RT: 10.24 min Scan# 1501

Delta R.T. 0.01 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Instrument :

MSVOA_X

ClientSampleId :

201021073-02-VOA

Tot Ion: 91 Resp: 74272

Ion Ratio Lower Upper

91 100

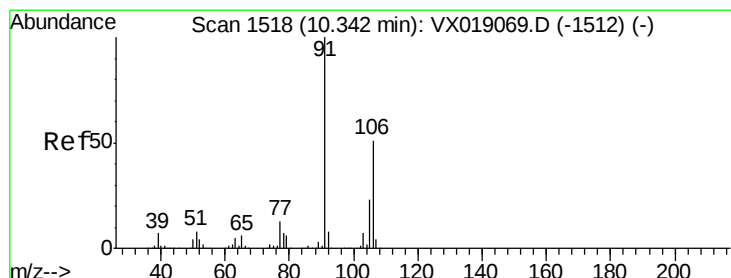
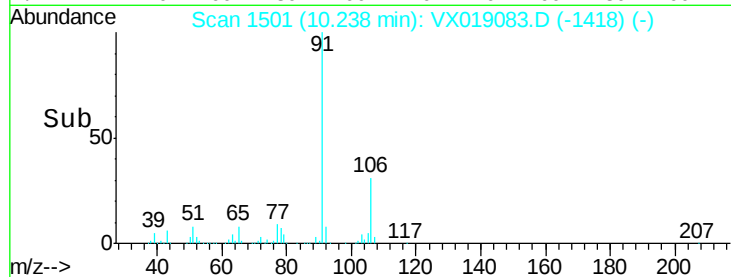
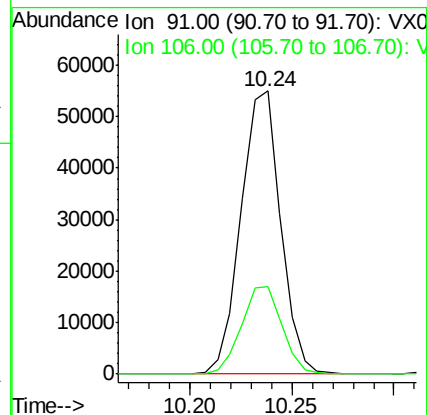
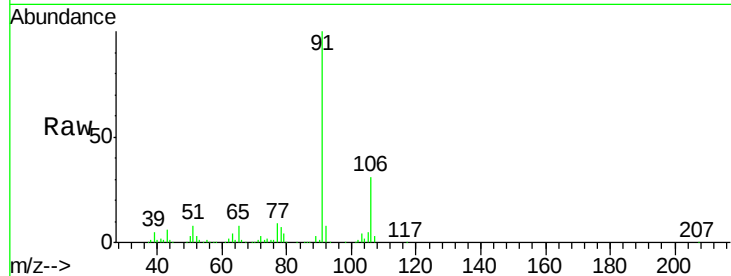
106 31.1 24.7 37.1

Manual Integrations

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#67

m/p-Xylenes

Concen: 12.146 ug/l

RT: 10.34 min Scan# 1518

Delta R.T. 0.00 min

Lab File: VX019083.D

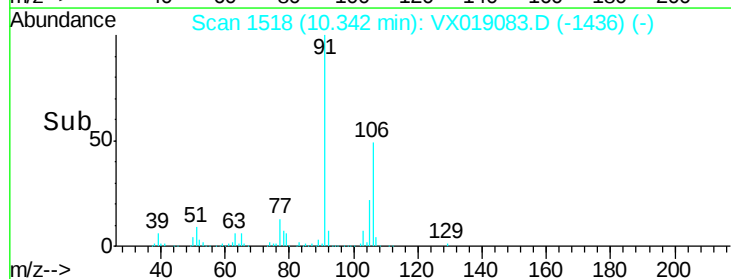
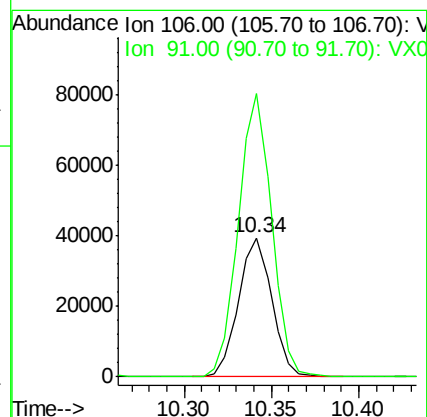
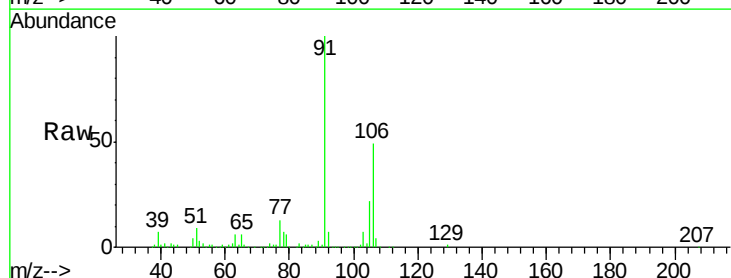
Acq: 23 Oct 2020 18:01

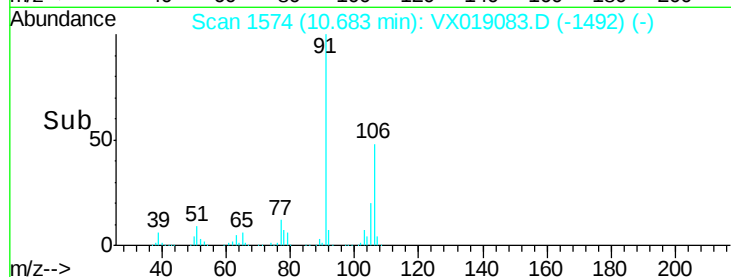
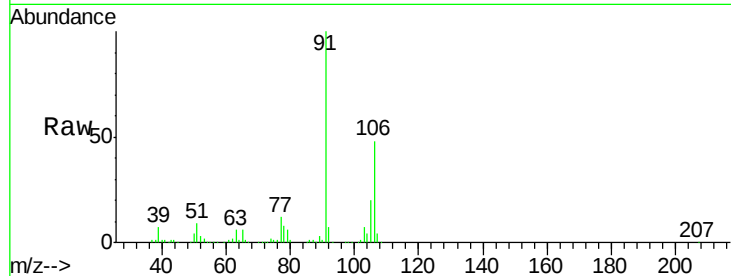
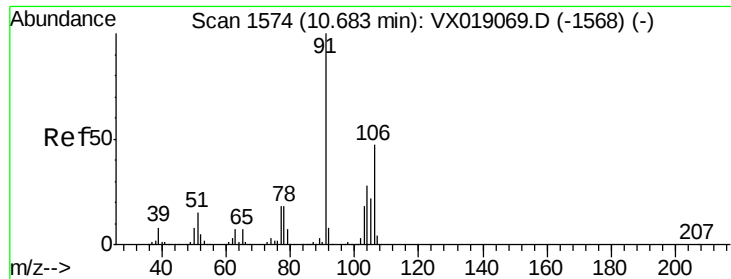
Tgt Ion: 106 Resp: 52599

Ion Ratio Lower Upper

106 100

91 202.8 157.5 236.3





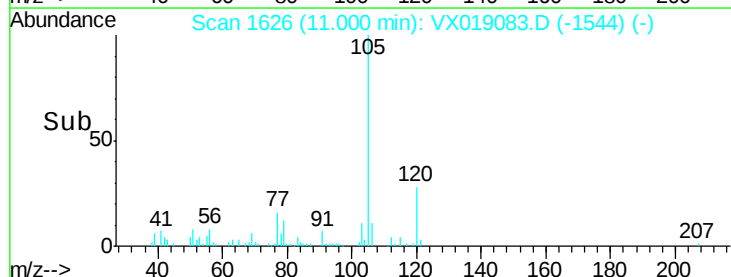
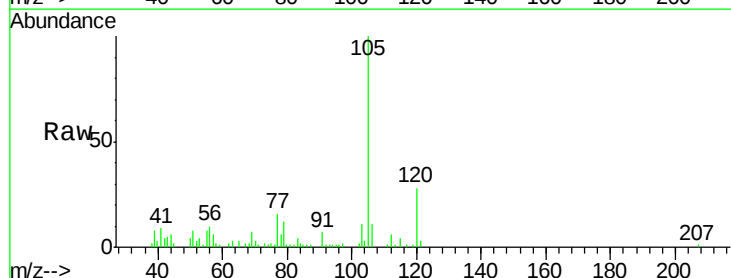
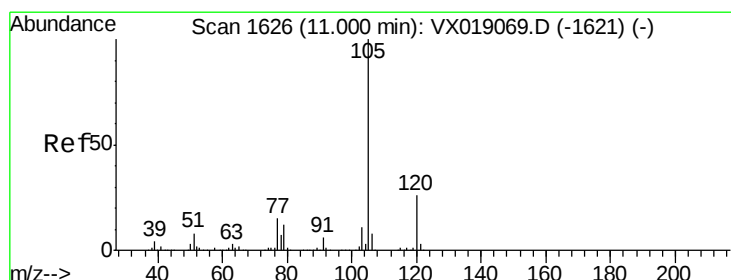
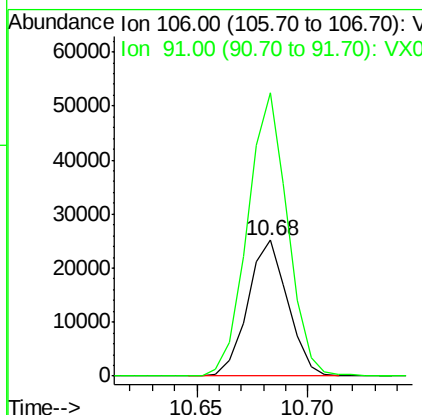
#68
o-Xylene
Concen: 7.632 ug/l
RT: 10.68 min Scan# 1574
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tot Ion:106 Resp: 31523
Ion Ratio Lower Upper
106 100
91 208.6 103.8 311.4

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

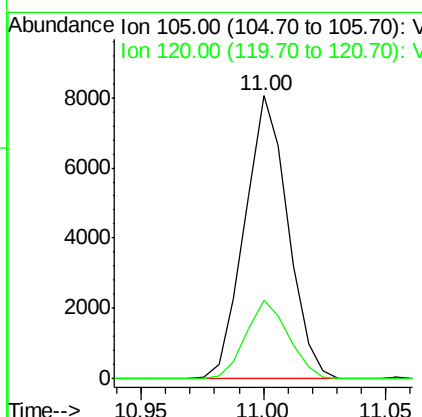
Manual Integrations
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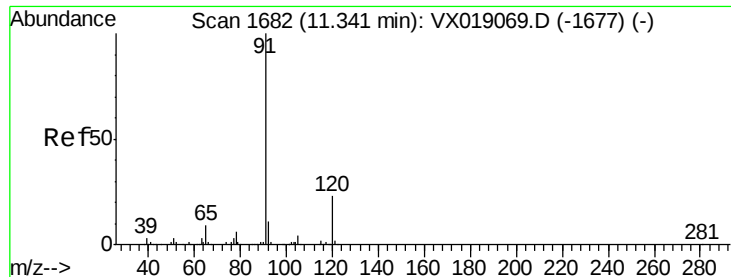
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#70
Isopropylbenzene
Concen: 0.893 ug/l
RT: 11.00 min Scan# 1626
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion:105 Resp: 9917
Ion Ratio Lower Upper
105 100
120 27.5 19.0 35.4





#74

n-propylbenzene

Concen: 0.251 ug/l

RT: 11.34 min Scan# 1682

Delta R.T. 0.00 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Instrument :

MSVOA_X

ClientSampleId :

201021073-02-VOA

Tot Ion: 91 Resp: 3158

Ion Ratio Lower Upper

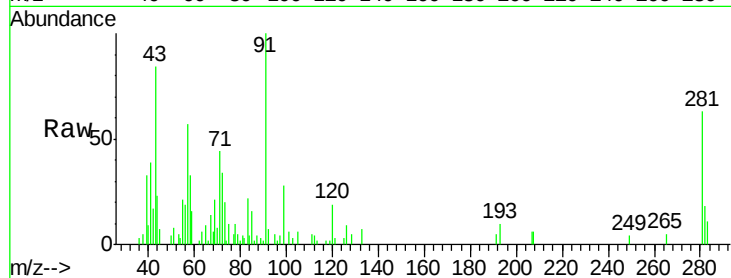
91 100

120 21.3 0.0 46.6

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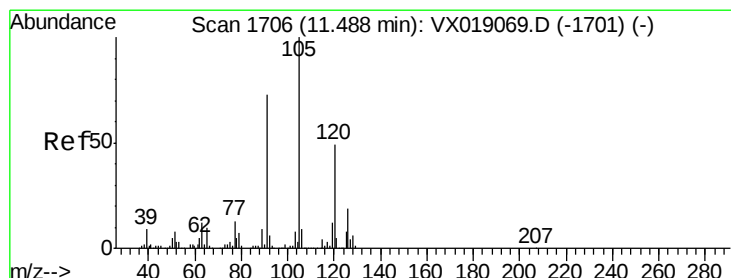
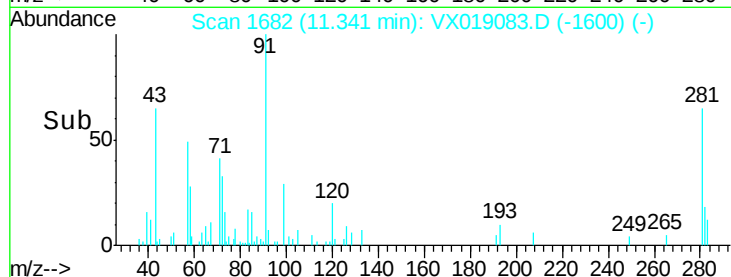
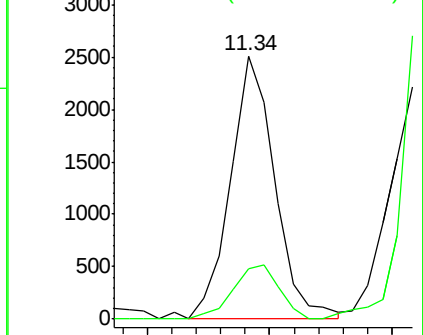
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Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 120.00 (119.70 to 120.70): V



#76

1,3,5-Trimethylbenzene

Concen: 1.132 ug/l

RT: 11.49 min Scan# 1706

Delta R.T. 0.00 min

Lab File: VX019083.D

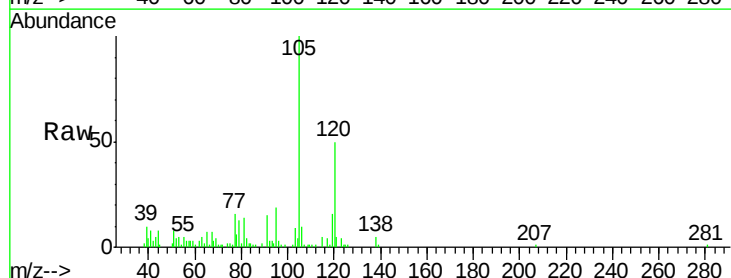
Acq: 23 Oct 2020 18:01

Tgt Ion: 105 Resp: 10201

Ion Ratio Lower Upper

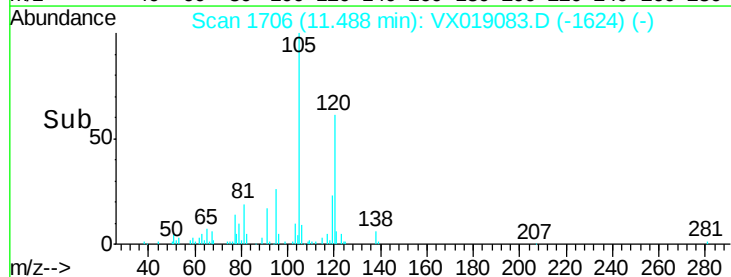
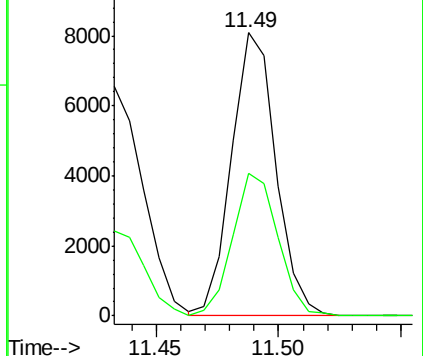
105 100

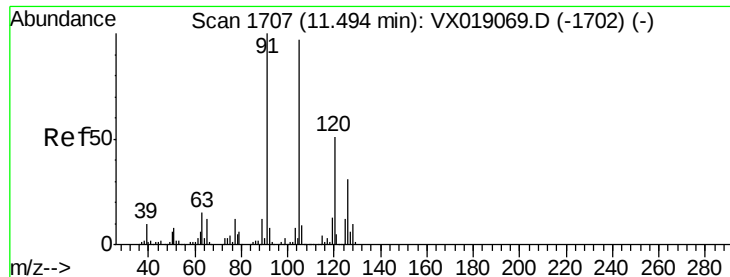
120 51.0 0.0 100.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#78

4-Chlorotoluene

Concen: 0.254 ug/l

RT: 11.49 min Scan# 1707

Delta R.T. 0.00 min

Lab File: VX019083.D

Acq: 23 Oct 2020 18:01

Instrument :

MSVOA_X

ClientSampleId :

201021073-02-VOA

Tot Ion: 91 Resp: 2121

Ion Ratio Lower Upper

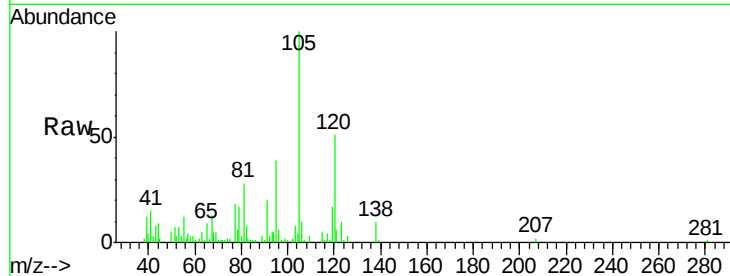
91 100

126 7.5 0.0 61.2

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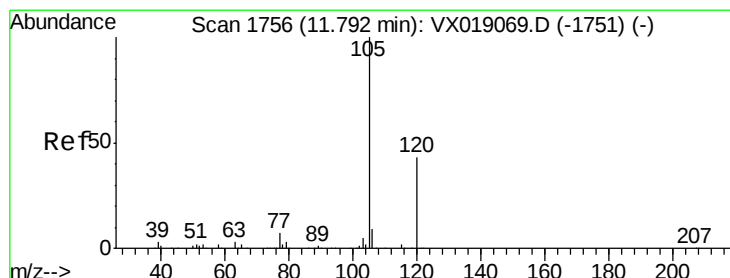
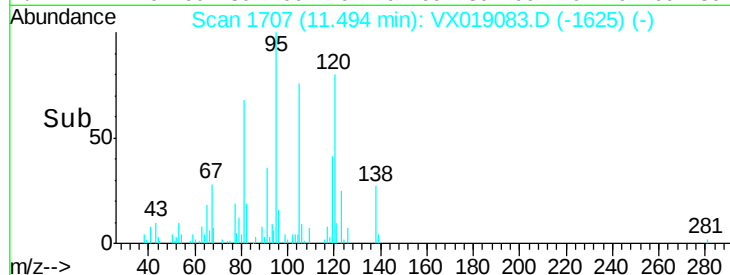
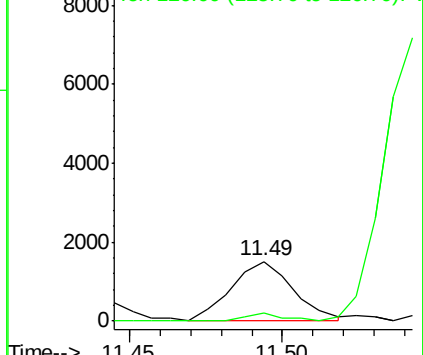
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Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 126.00 (125.70 to 126.70): V



#80

1,2,4-Trimethylbenzene

Concen: 4.276 ug/l

RT: 11.79 min Scan# 1756

Delta R.T. 0.00 min

Lab File: VX019083.D

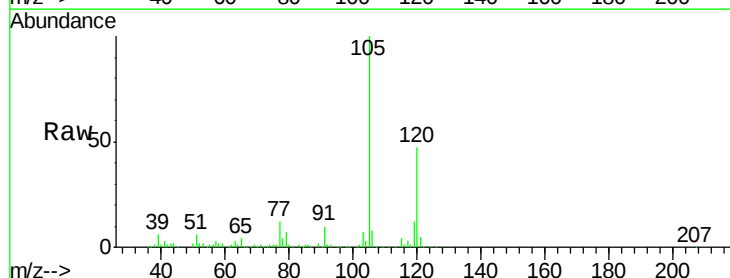
Acq: 23 Oct 2020 18:01

Tgt Ion: 105 Resp: 38303

Ion Ratio Lower Upper

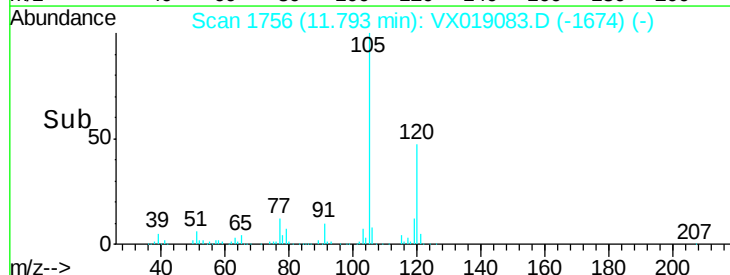
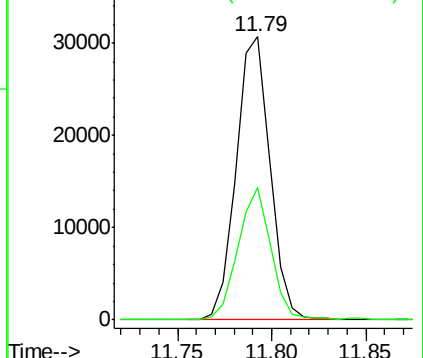
105 100

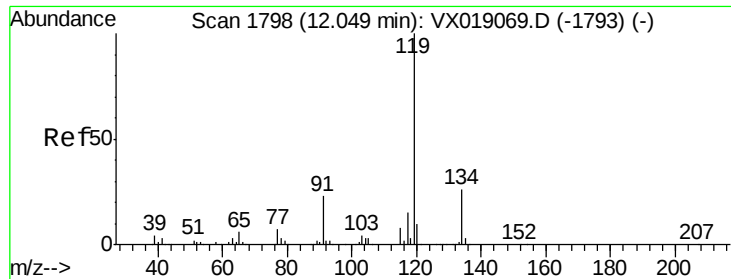
120 45.4 0.0 92.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





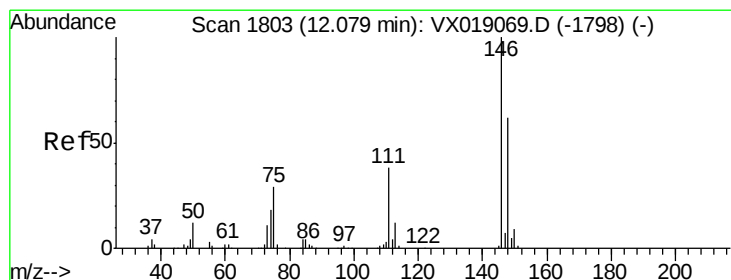
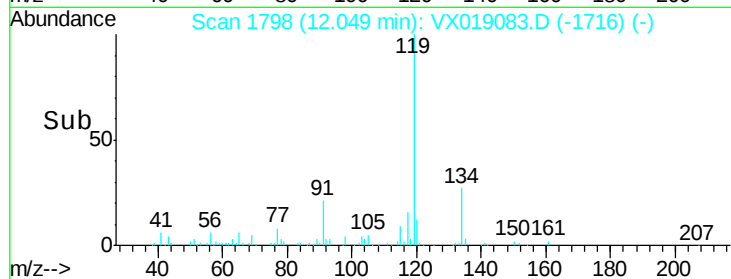
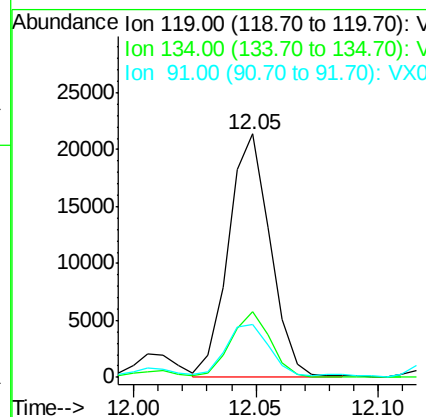
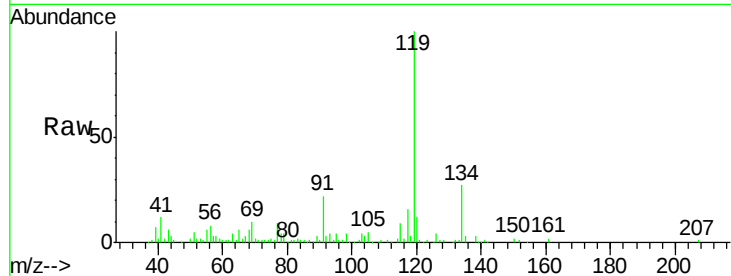
#82
p-Isopropyltoluene
Concen: 2.629 ug/l
RT: 12.05 min Scan# 1798
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Instrument :
MSVOA_X
ClientSampleId :
201021073-02-VOA

Tot Ion	Ratio	Resp	Lower	Upper
119	100	25442		
134	25.6	0.0	52.0	
91	22.4	0.0	45.6	

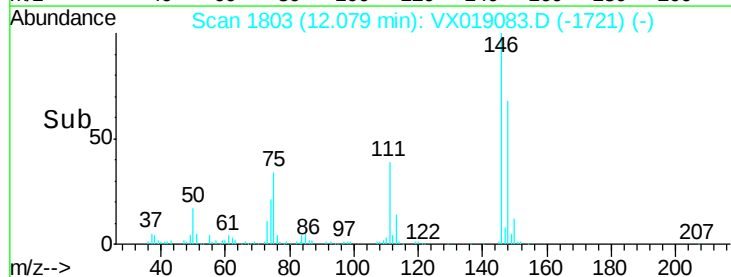
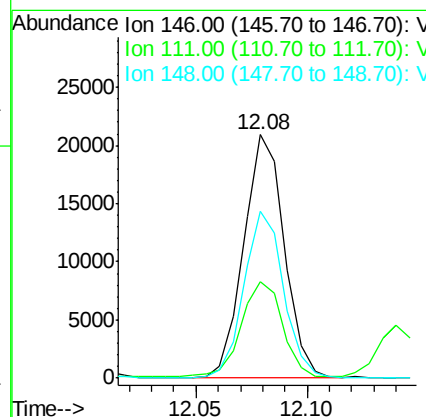
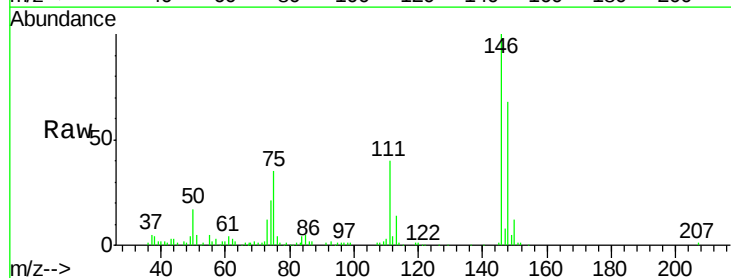
Manual Integrations
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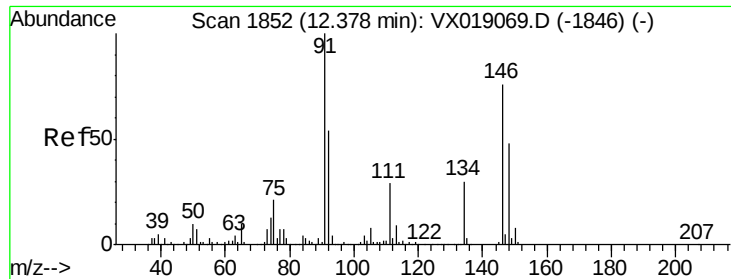
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#84
1,4-Dichlorobenzene
Concen: 5.418 ug/l
RT: 12.08 min Scan# 1803
Delta R.T. 0.00 min
Lab File: VX019083.D
Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Resp	Lower	Upper
146	100	26684		
111	39.6	18.9	56.7	
148	66.8	31.6	95.0	





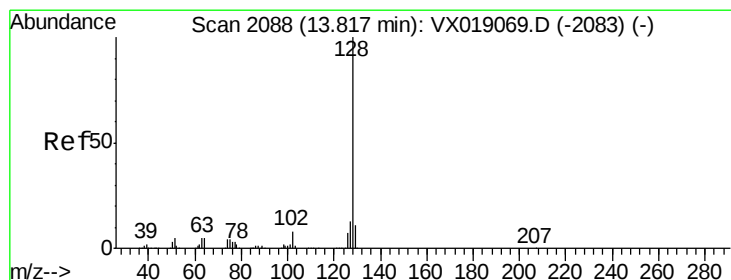
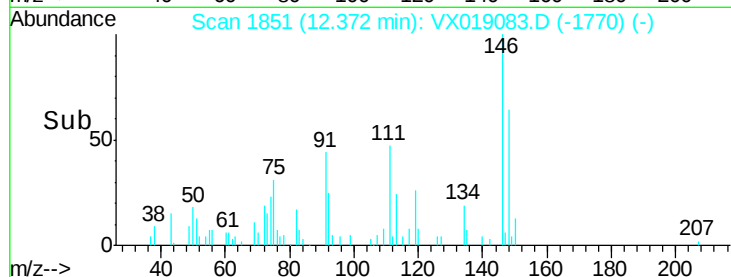
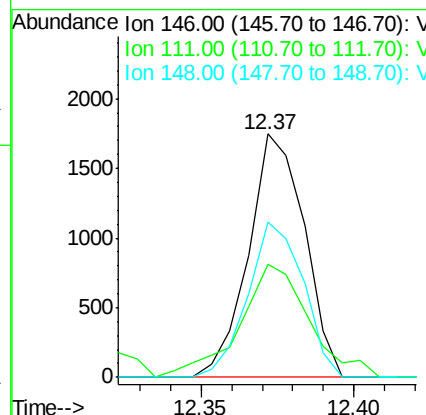
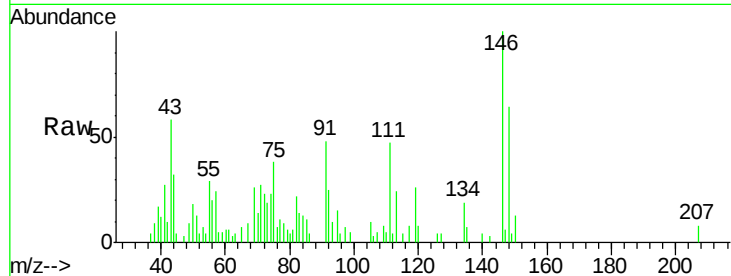
#87
 1,2-Dichlorobenzene
 Concen: 0.478 ug/l
 RT: 12.37 min Scan# 1851
 Delta R.T. -0.01 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Instrument :
 MSVOA_X
 ClientSampleId :
 201021073-02-VOA

Tot Ion	Ratio	Lower	Upper
146	100		
111	57.8	20.3	61.0
148	63.4	32.1	96.5

Manual Integrations
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#91
 Naphthalene
 Concen: 15.435 ug/l
 RT: 13.82 min Scan# 2088
 Delta R.T. 0.00 min
 Lab File: VX019083.D
 Acq: 23 Oct 2020 18:01

Tgt Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	16.0
129	11.1	8.9	13.3

