

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX020720\
 Data File : VX014870.D
 Acq On : 07 Feb 2020 14:51
 Operator : JC/SP
 Sample : L1420-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 400205799-VOA

Manual Integrations
 APPROVED

MMDadoda
 2/10/2020 10:49:36 AM

Quant Time: Feb 07 22:45:38 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X011520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Jan 15 12:41:12 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.01	128	65769	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.85	114	377012	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.11	117	342173	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.05	65	146898	31.78	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	105.93%
60) 4-Bromofluorobenzene	11.13	95	161147	29.43	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	98.10%
63) Toluene-d8	8.71	98	449091	29.06	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	96.87%

Target Compounds

					Ovalue
8) Diethyl Ether	2.17	74	8479	3.138 ug/l	91
23) tert-Butyl Alcohol	3.02	59	7580800	8145.110 ug/l	100
24) Methyl tert-Butyl Ether	3.19	73	37759	3.116 ug/l	92
34) Benzene	6.13	78	35402	2.072 ug/l #	90
36) 1,2-Dichloroethane	6.19	62	4048	0.681 ug/l #	77
45) 1,4-Dioxane	7.73	88	14234	139.119 ug/l	95
58) 4-Methyl-2-Pentanone	8.64	43	54313m	8.429 ug/l	
62) Toluene	8.78	91	45416	2.502 ug/l	99
64) Chlorobenzene	10.14	112	10904m	0.962 ug/l	
67) m/p-Xylenes	10.35	106	61140	8.072 ug/l	95
68) o-Xylene	10.70	106	43435	5.889 ug/l	97
76) 1,3,5-Trimethylbenzene	11.50	105	15014	0.933 ug/l	99
80) 1,2,4-Trimethylbenzene	11.80	105	47252	2.943 ug/l	98
82) p-Isopropyltoluene	12.06	119	11673	0.686 ug/l	91
84) 1,4-Dichlorobenzene	12.09	146	47897	5.402 ug/l	98
87) 1,2-Dichlorobenzene	12.39	146	4765	0.528 ug/l	94
91) Naphthalene	13.83	128	39002	2.169 ug/l	98

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

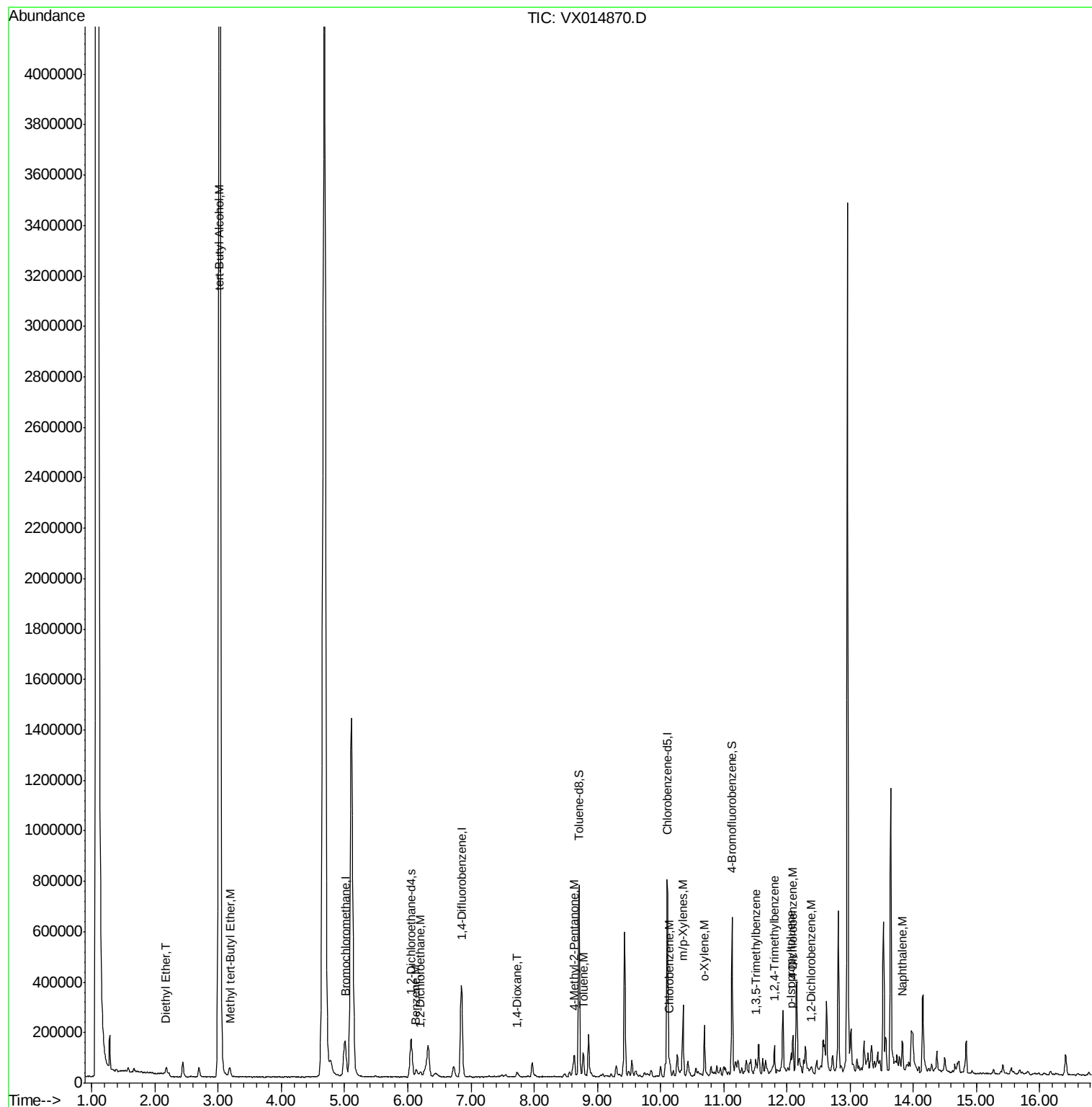
Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX020720\
Data File : VX014870.D
Acq On : 07 Feb 2020 14:51
Operator : JC/SP
Sample : L1420-01
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ALS Vial : 10 Sample Multiplier: 1

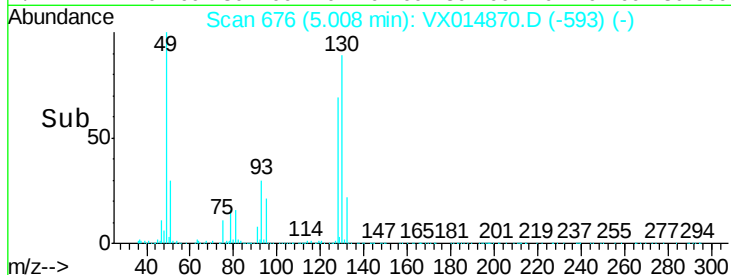
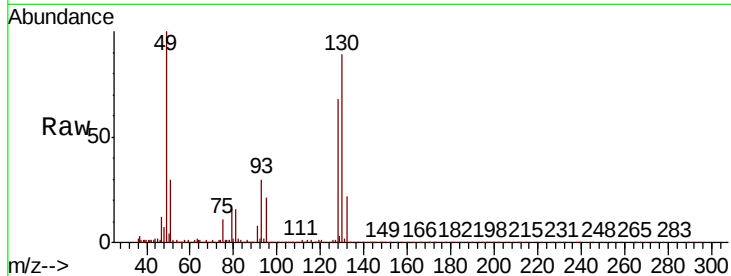
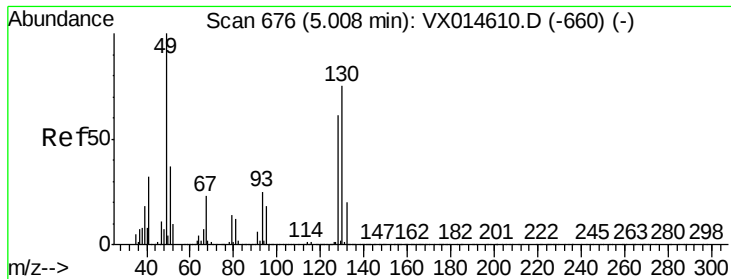
Instrument :
MSVOA_X
ClientSampleId :
400205799-VOA

Manual Integrations
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Quant Time: Feb 07 22:45:38 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X011520W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jan 15 12:41:12 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 5.01 min Scan# 676

Delta R.T. 0.01 min

Lab File: VX014870.D

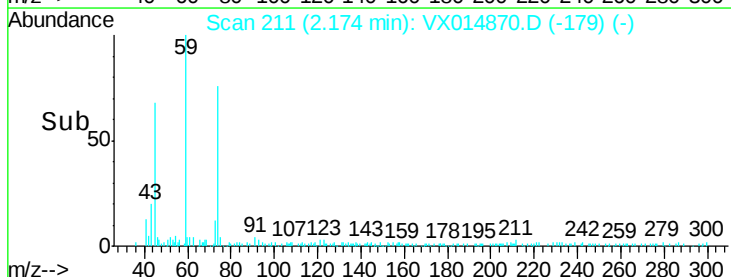
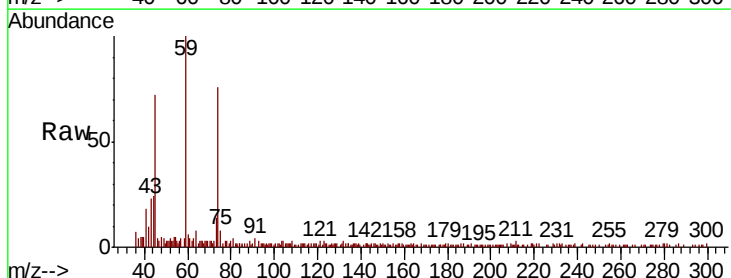
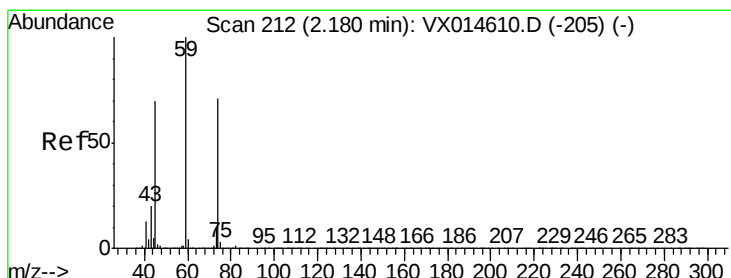
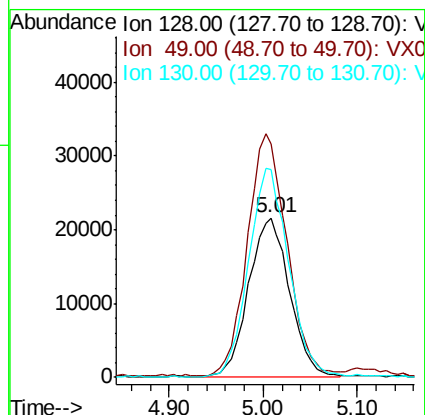
Acq: 07 Feb 2020 14:51

Tot Ion:	128	Resp:	65769
Ion	Ratio	Lower	Upper
128	100		
49	145.6	0.0	405.0
130	129.3	0.0	321.5

Instrument :
MSVOA_X
ClientSampleId :
400205799-VOA

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#8

Diethyl Ether

Concen: 3.138 ug/l

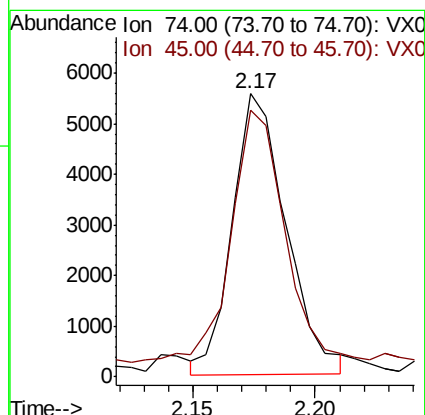
RT: 2.17 min Scan# 211

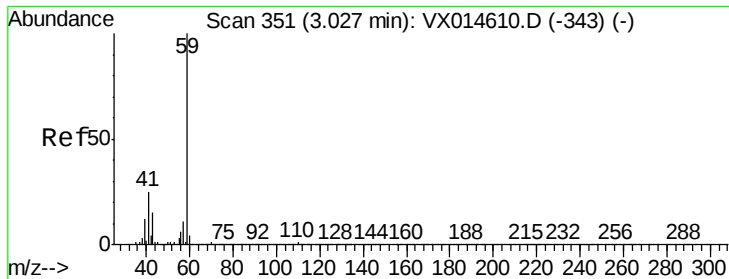
Delta R.T. -0.01 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Tgt Ion:	74	Resp:	8479
Ion	Ratio	Lower	Upper
74	100		
45	94.0	20.6	185.0





#23

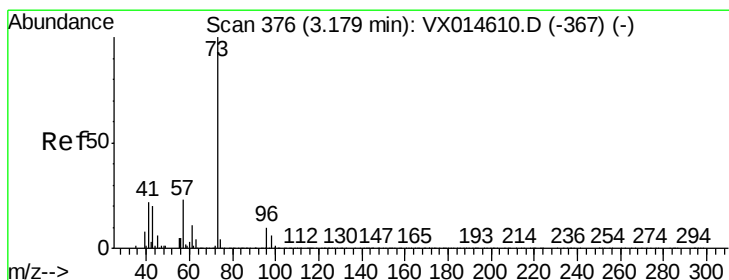
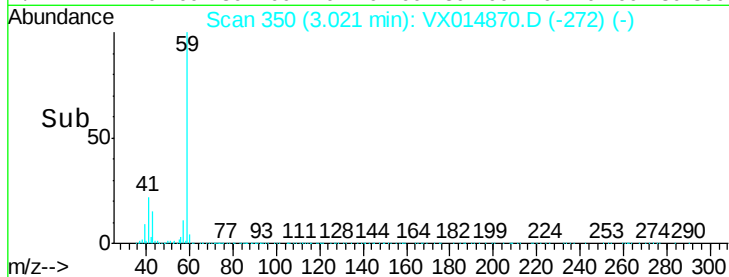
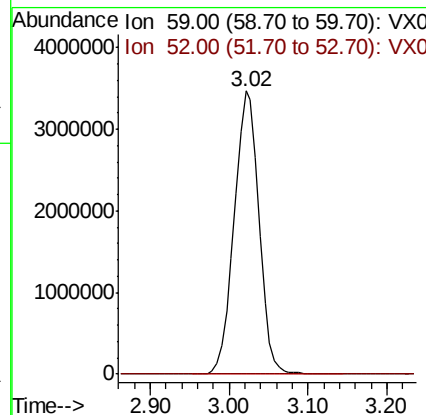
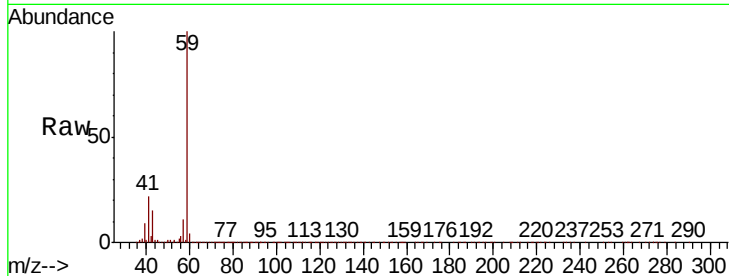
tert-Butyl Alcohol
Concen: 8145.110 ug/l
RT: 3.02 min Scan# 350
Delta R.T. -0.02 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Instrument :
MSVOA_X
ClientSampleId :
400205799-VOA

Tot Ion: 59 Resp: 7580800
Ion Ratio Lower Upper
59 100
52 0.2 0.2 0.2

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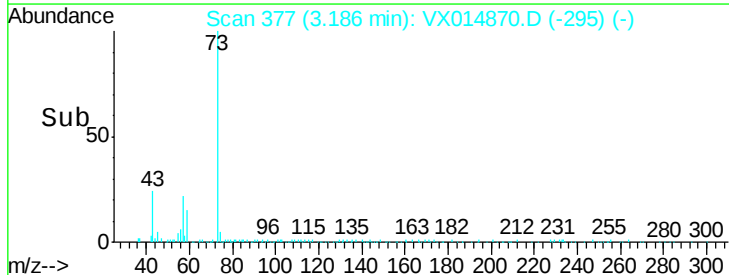
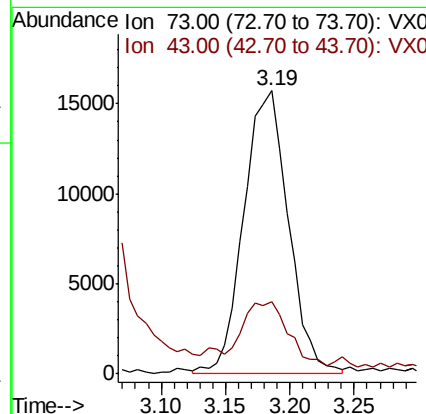
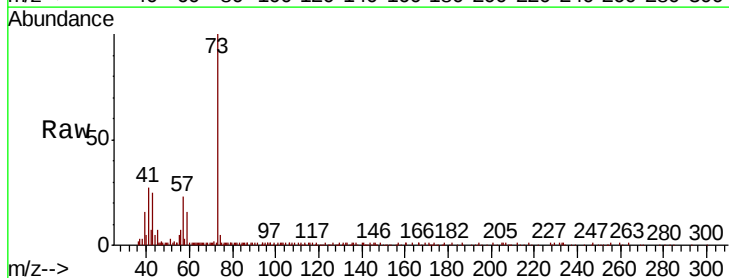
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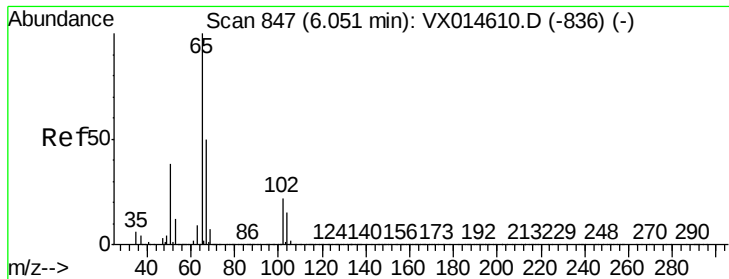


#24

Methyl tert-Butyl Ether
Concen: 3.116 ug/l
RT: 3.19 min Scan# 377
Delta R.T. 0.00 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Tgt Ion: 73 Resp: 37759
Ion Ratio Lower Upper
73 100
43 24.6 16.6 25.0





#27

1,2-Dichloroethane-d4

Concen: 31.777 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Instrument :

MSVOA_X

ClientSampleId :

400205799-VOA

Tot Ion: 65 Resp: 146898

Ion Ratio Lower Upper

65 100

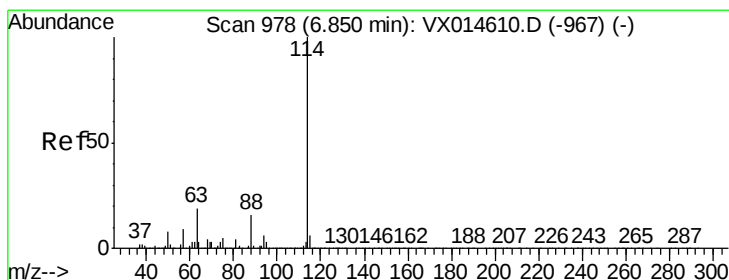
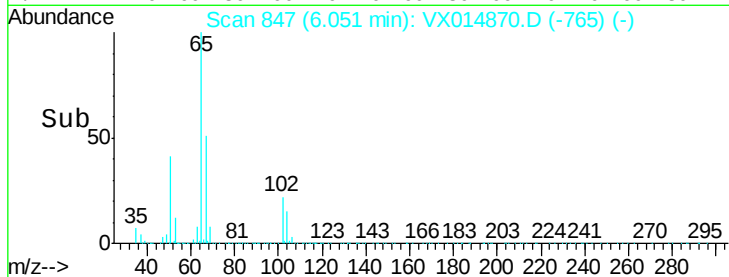
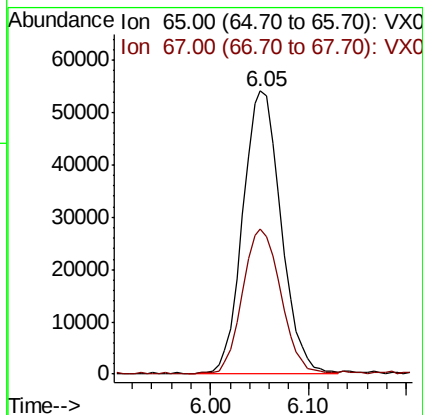
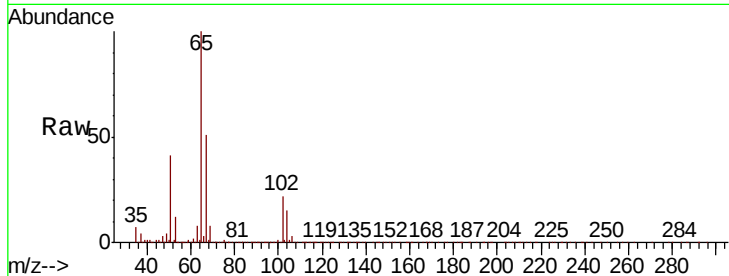
67 51.4 43.1 64.7

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#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

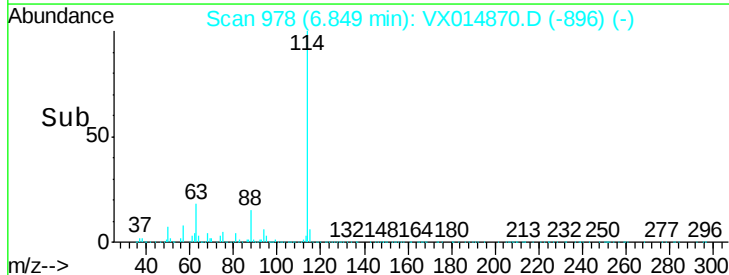
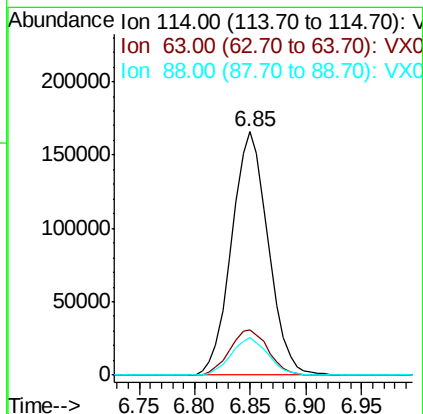
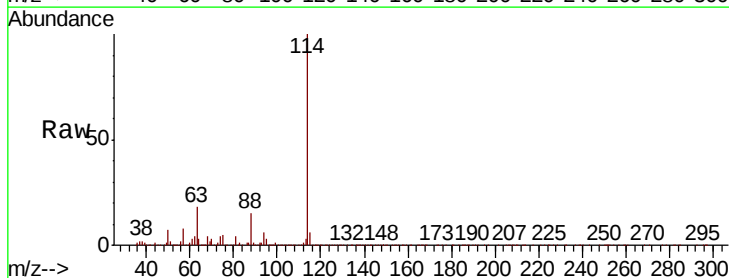
Tgt Ion: 114 Resp: 377012

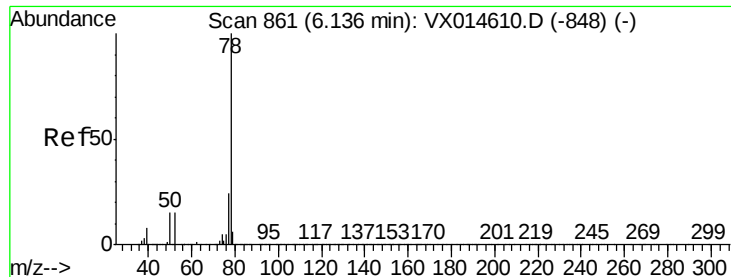
Ion Ratio Lower Upper

114 100

63 19.4 16.1 24.1

88 15.4 12.5 18.7





#34

Benzene

Concen: 2.072 ug/l

RT: 6.13 min Scan# 860

Delta R.T. 0.00 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Instrument :

MSVOA_X

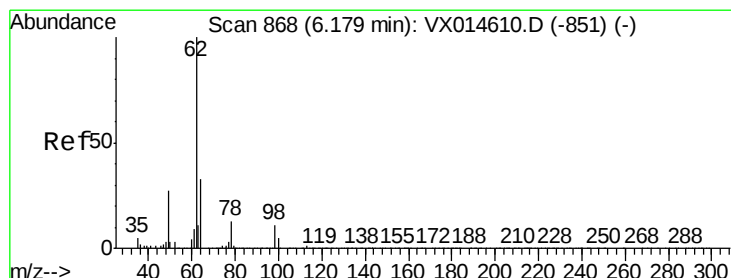
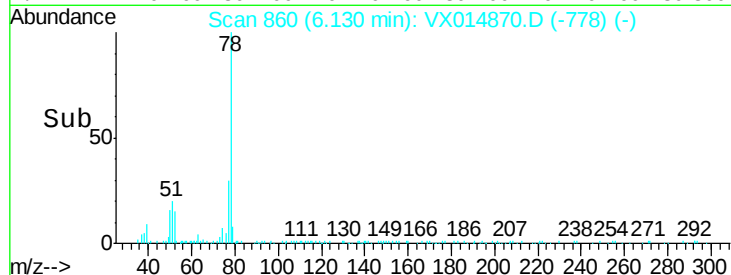
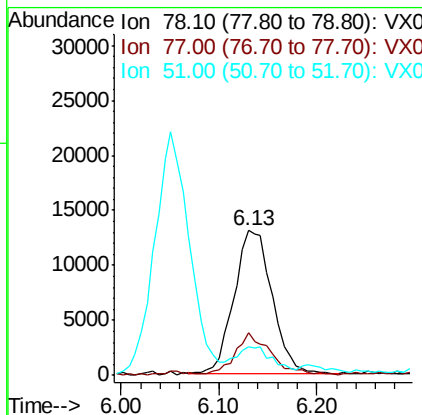
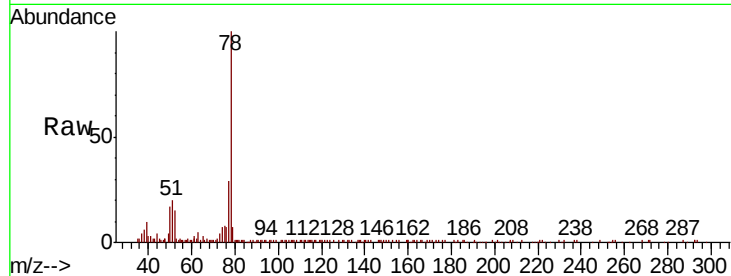
ClientSampleId :

400205799-VOA

Tot Ion:	78	Resp:	35402
Ion Ratio	Lower	Upper	
78	100		
77	29.8	18.2	27.2#
51	16.3	12.4	18.6

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#36

1,2-Dichloroethane

Concen: 0.681 ug/l

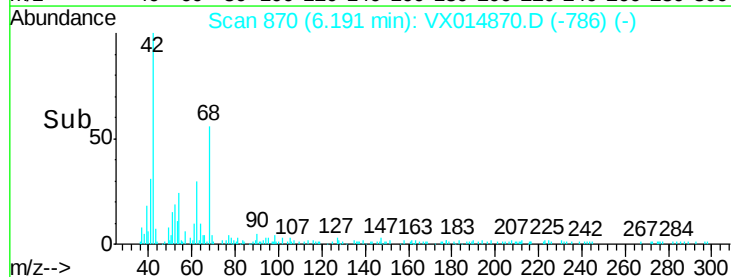
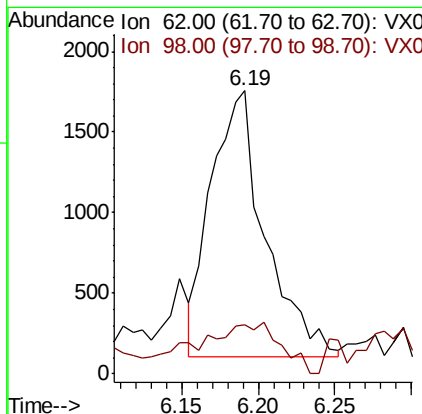
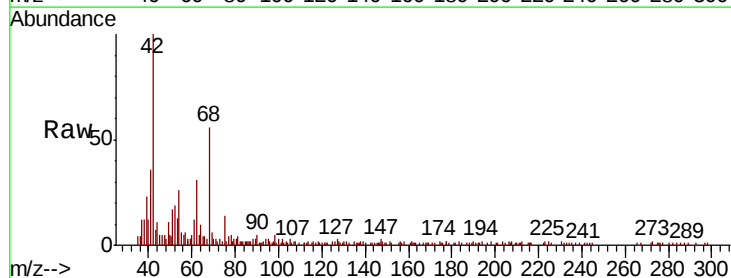
RT: 6.19 min Scan# 870

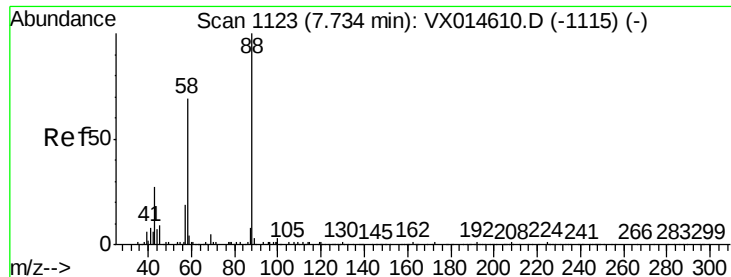
Delta R.T. 0.01 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Tgt Ion:	62	Resp:	4048
Ion Ratio	Lower	Upper	
62	100		
98	2.1	8.4	12.6#





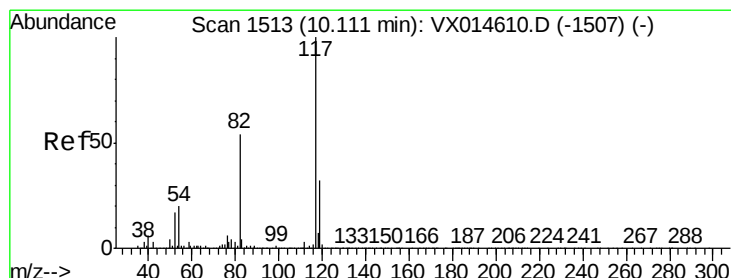
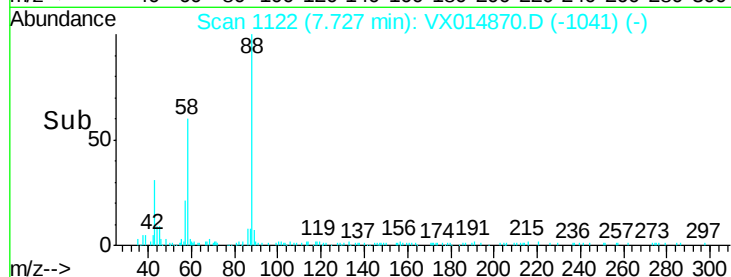
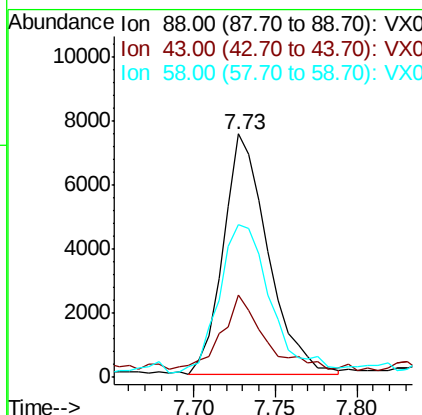
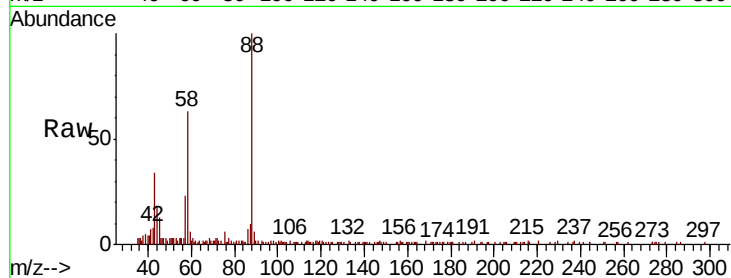
#45
1,4-Dioxane
Concen: 139.119 ug/l
RT: 7.73 min Scan# 1122
Delta R.T. -0.01 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Instrument :
MSVOA_X
ClientSampleId :
400205799-VOA

Tot Ion:	88	Resp:	14234
Ion Ratio	Lower	Upper	
88	100		
43	26.6	25.4	38.2
58	68.5	56.5	84.7

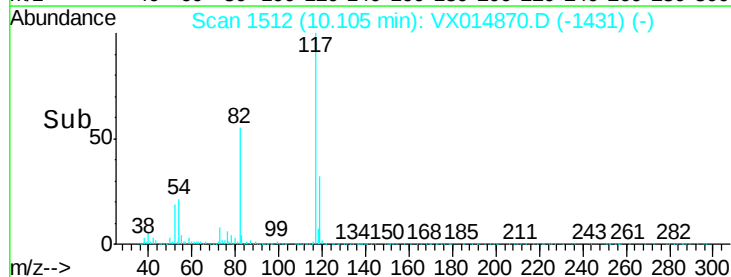
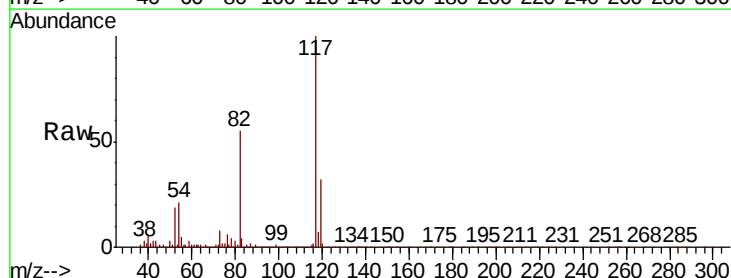
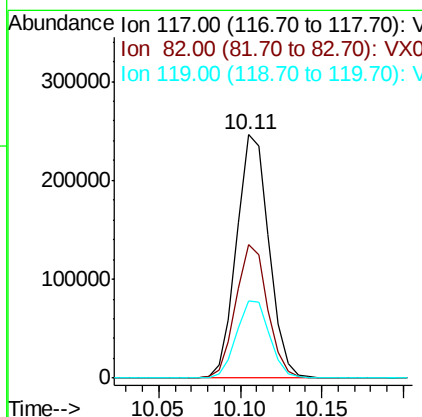
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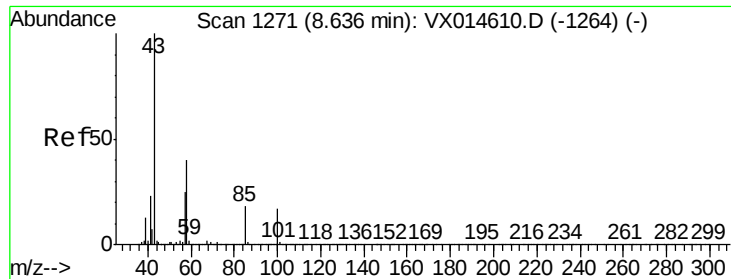
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#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.11 min Scan# 1512
Delta R.T. -0.01 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Tgt Ion:	117	Resp:	342173
Ion Ratio	Lower	Upper	
117	100		
82	53.5	43.8	65.6
119	32.4	25.8	38.6





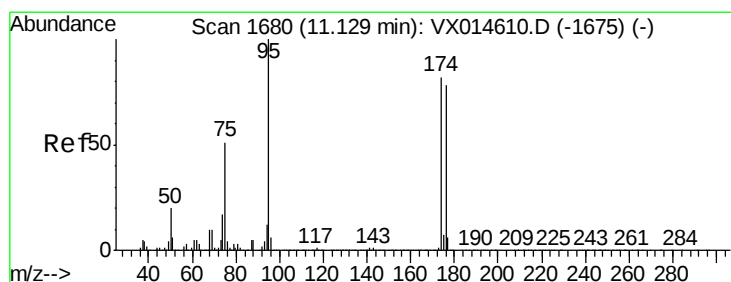
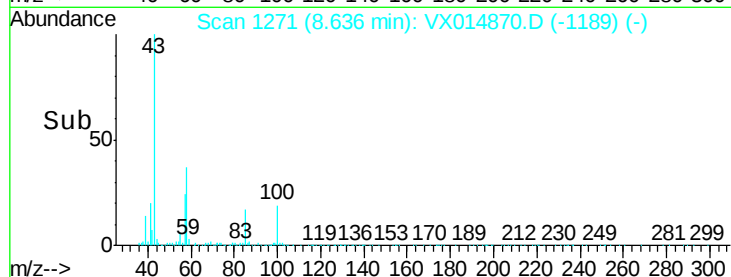
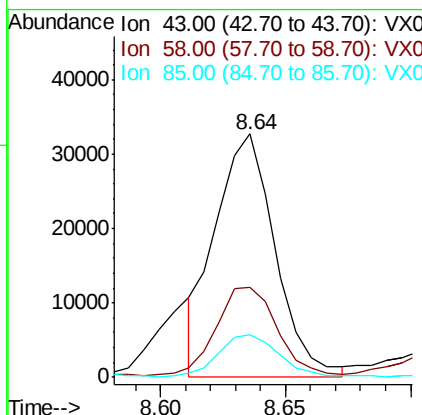
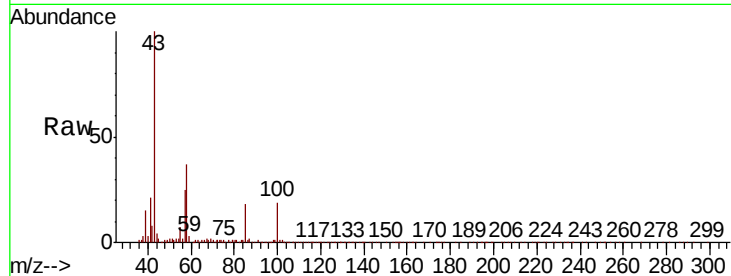
#58
 4-Methyl-2-Pentanone
 Concen: 8.429 ug/l
 RT: 8.64 min Scan# 1271
 Delta R.T. 0.00 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Instrument :
 MSVOA_X
 ClientSampleId :
 400205799-VOA

Tot Ion:	43	Resp:	54313
Ion Ratio	Lower	Upper	
43	100		
58	37.1	31.2	46.8
85	17.3	14.2	21.2

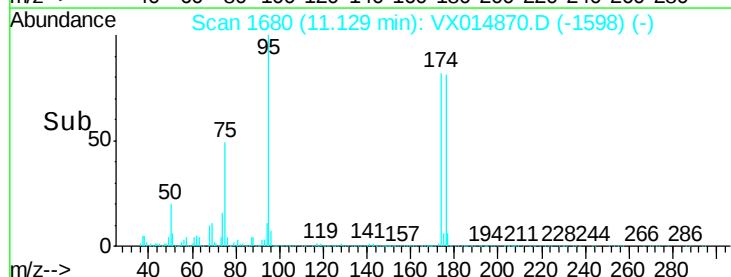
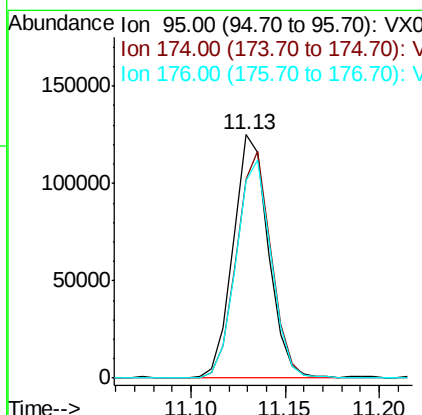
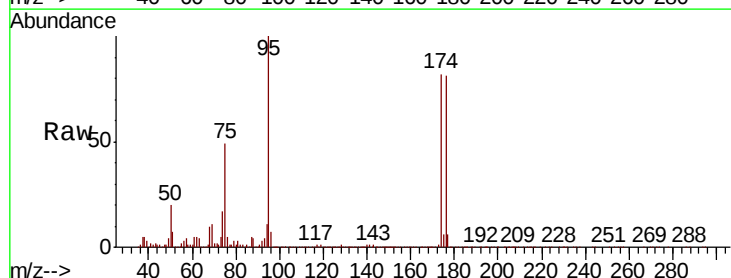
Manual Integrations
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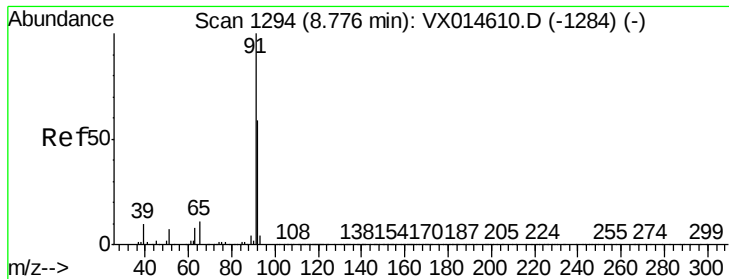
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#60
 4-Bromofluorobenzene
 Concen: 29.431 ug/l
 RT: 11.13 min Scan# 1680
 Delta R.T. 0.00 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Tgt Ion:	95	Resp:	161147
Ion Ratio	Lower	Upper	
95	100		
174	92.3	70.2	105.2
176	89.6	68.3	102.5





#62

Toluene

Concen: 2.502 ug/l

RT: 8.78 min Scan# 1295

Delta R.T. 0.00 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Instrument :

MSVOA_X

ClientSampleId :

400205799-VOA

Tot Ion: 91 Resp: 45416

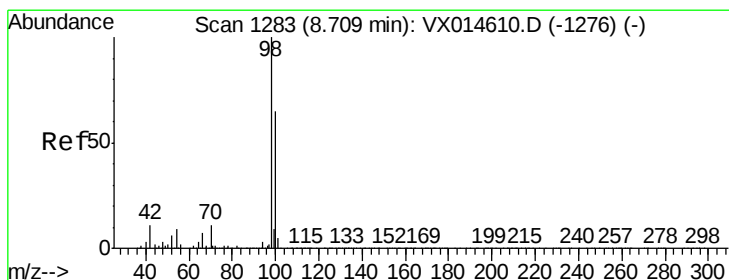
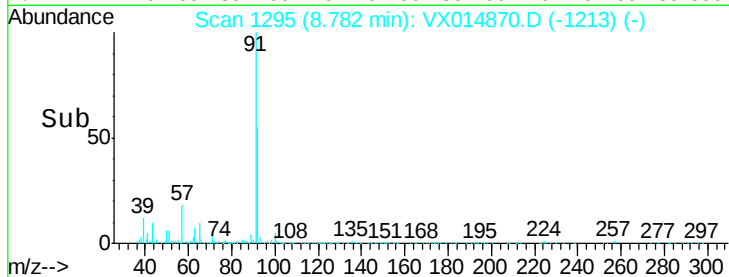
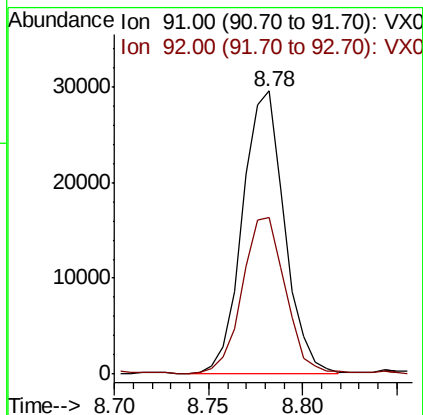
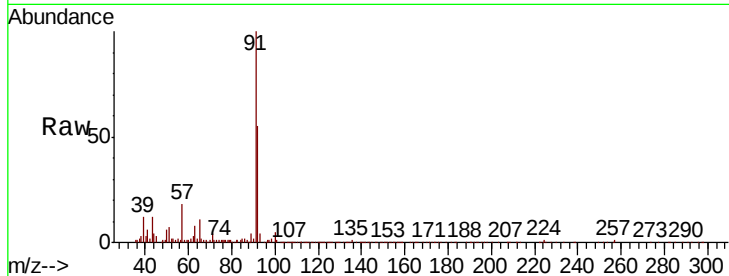
Ion Ratio Lower Upper

91 100

92 57.5 46.4 69.6

Manual Integrations
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#63

Toluene-d8

Concen: 29.056 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX014870.D

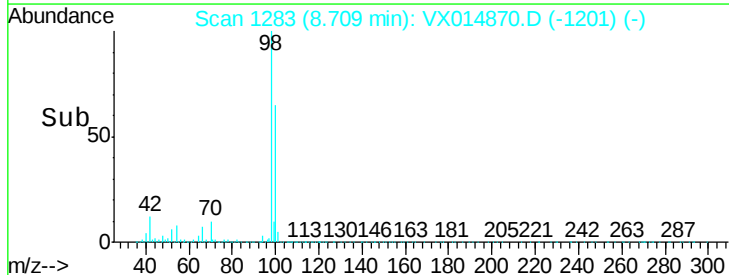
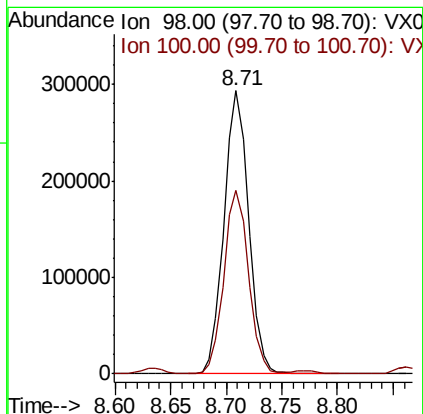
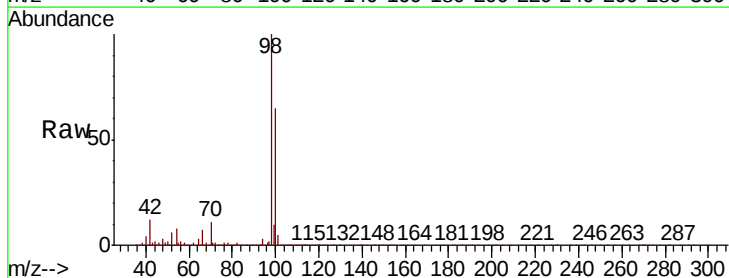
Acq: 07 Feb 2020 14:51

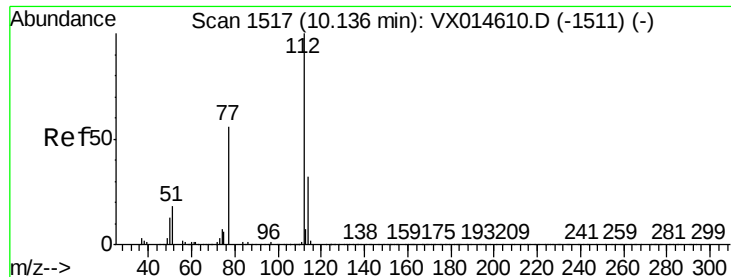
Tgt Ion: 98 Resp: 449091

Ion Ratio Lower Upper

98 100

100 64.8 52.2 78.2





#64

Chlorobenzene

Concen: 0.962 ug/l m

RT: 10.14 min Scan# 1517

Delta R.T. 0.00 min

Lab File: VX014870.D

Acq: 07 Feb 2020 14:51

Instrument :

MSVOA_X

ClientSampleId :

400205799-VOA

Tot Ion:112 Resp: 10904

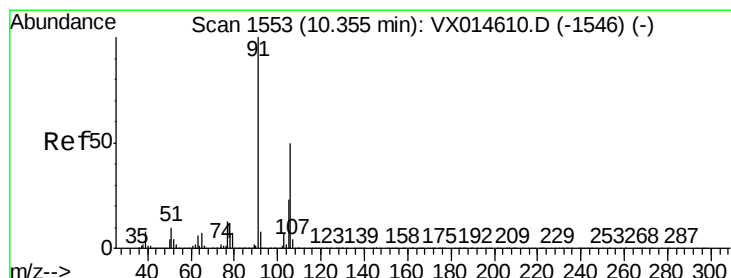
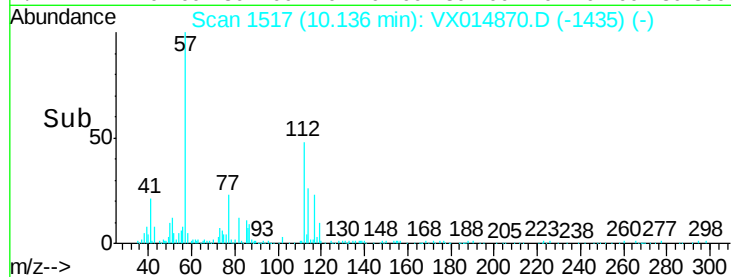
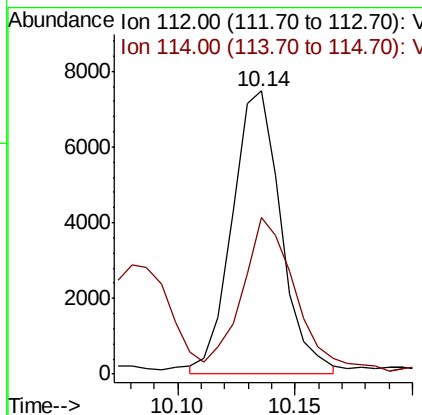
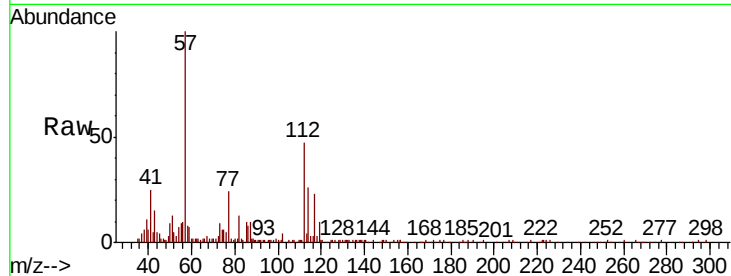
Ion Ratio Lower Upper

112 100

114 55.3 24.4 36.6#

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#67

m/p-Xylenes

Concen: 8.072 ug/l

RT: 10.35 min Scan# 1552

Delta R.T. -0.01 min

Lab File: VX014870.D

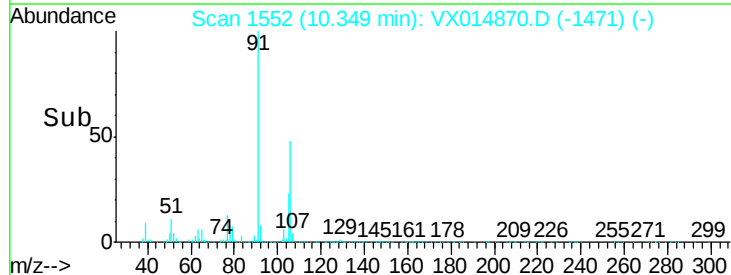
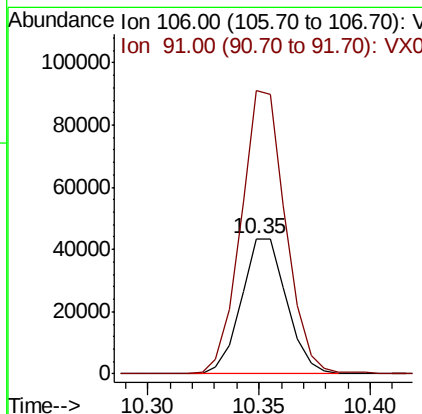
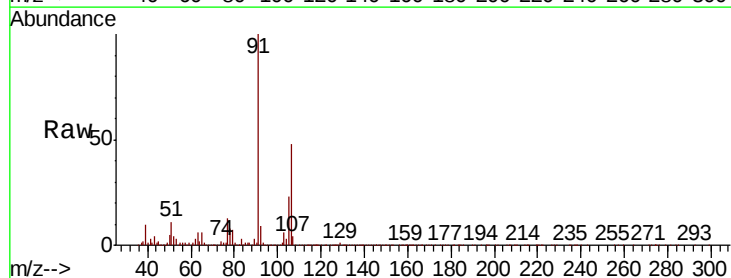
Acq: 07 Feb 2020 14:51

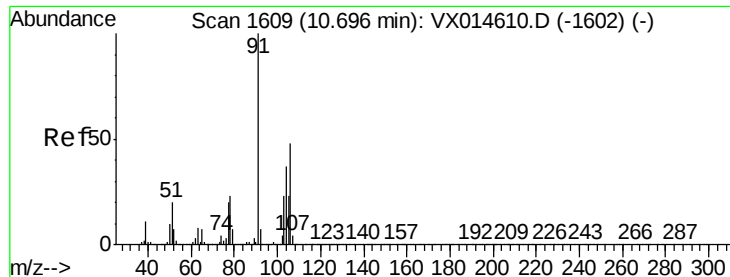
Tgt Ion:106 Resp: 61140

Ion Ratio Lower Upper

106 100

91 207.3 159.3 238.9





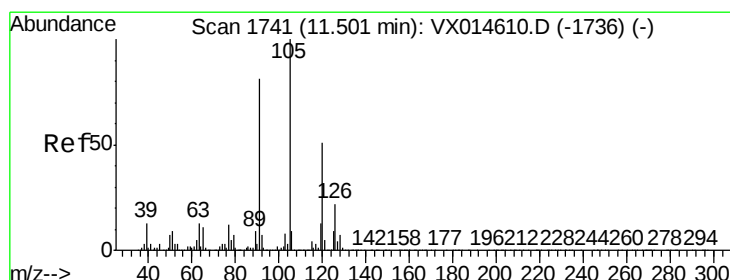
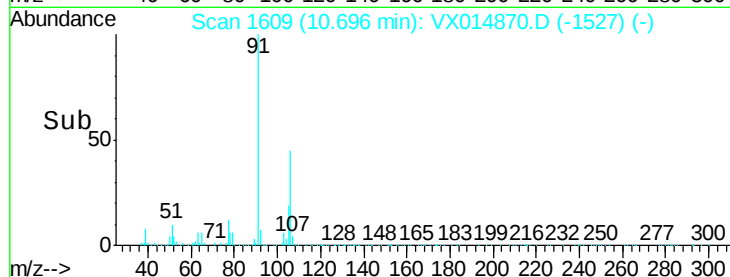
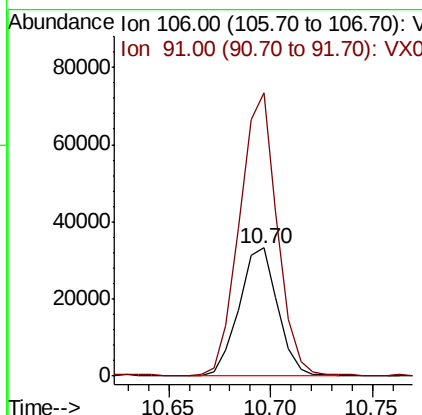
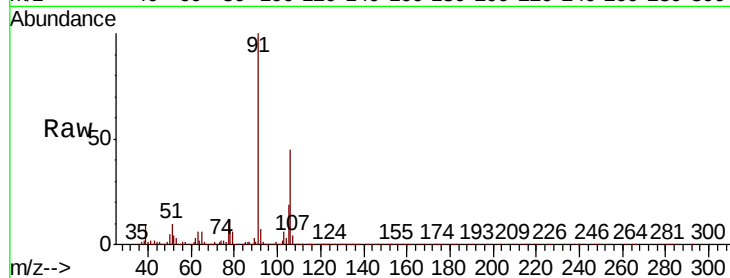
#68
o-Xylene
Concen: 5.889 ug/l
RT: 10.70 min Scan# 1609
Delta R.T. 0.00 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Instrument :
MSVOA_X
ClientSampled :
400205799-VOA

Tot Ion:106 Resp: 43435
Ion Ratio Lower Upper
106 100
91 214.9 104.8 314.6

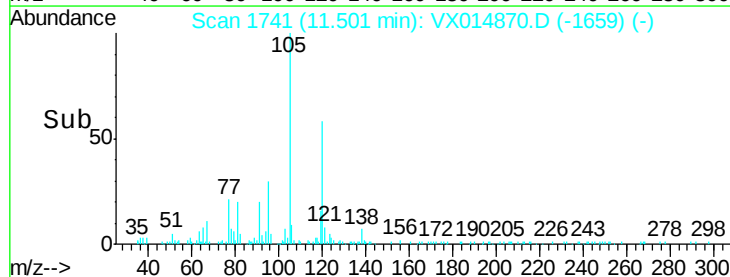
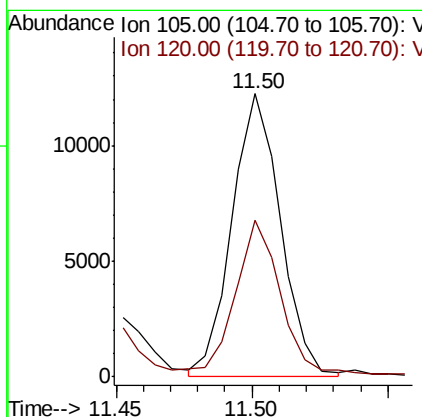
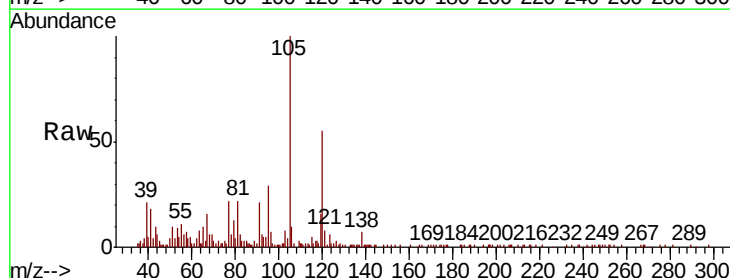
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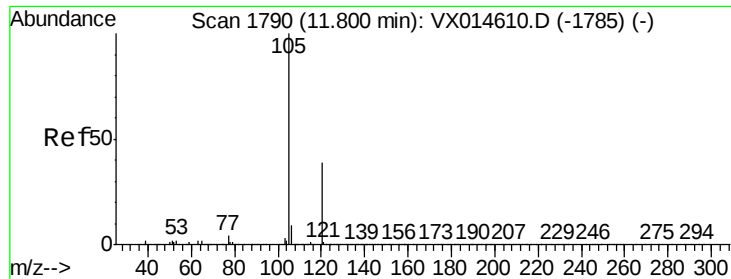
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#76
1,3,5-Trimethylbenzene
Concen: 0.933 ug/l
RT: 11.50 min Scan# 1741
Delta R.T. 0.00 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Tgt Ion:105 Resp: 15014
Ion Ratio Lower Upper
105 100
120 49.9 0.0 100.6





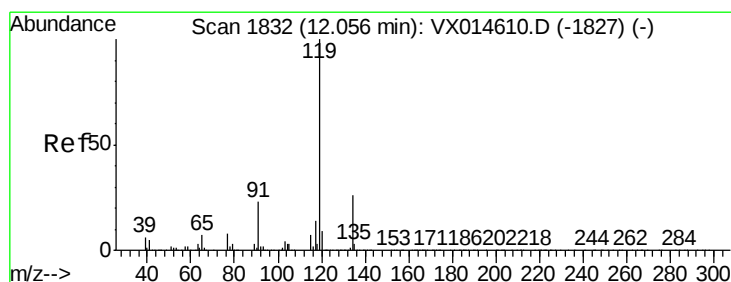
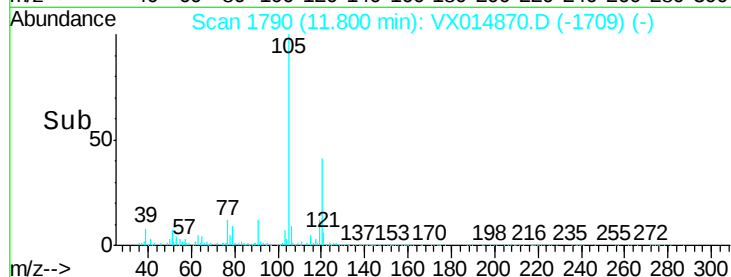
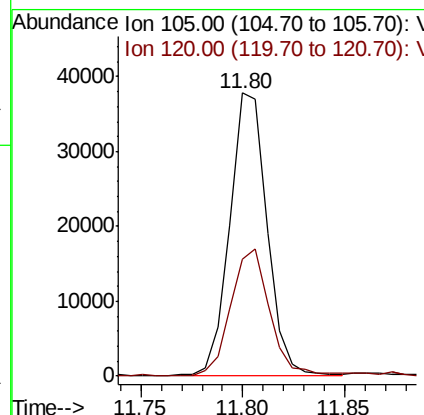
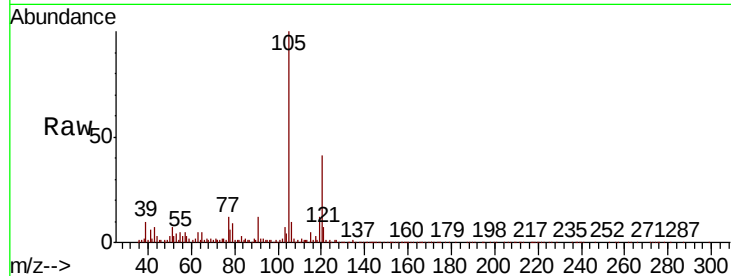
#80
 1,2,4-Trimethylbenzene
 Concen: 2.943 ug/l
 RT: 11.80 min Scan# 1790
 Delta R.T. -0.01 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Instrument :
 MSVOA_X
 ClientSampleId :
 400205799-VOA

Tot Ion	Ratio	Resp	Lower	Upper
105	100	47252		
120	47.5	0.0	92.0	

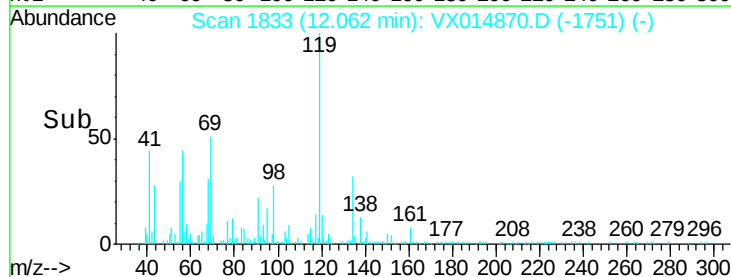
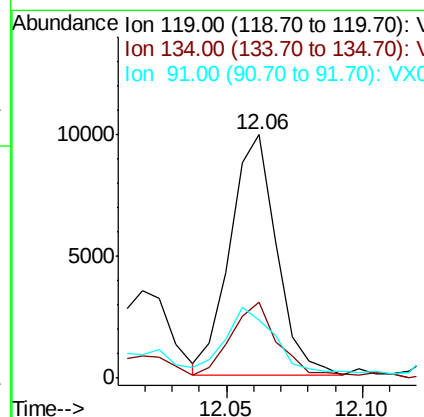
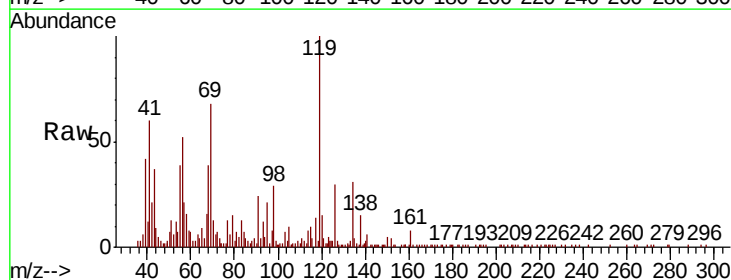
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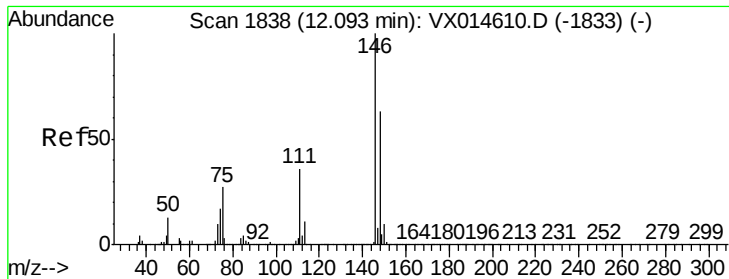
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#82
 p-Isopropyltoluene
 Concen: 0.686 ug/l
 RT: 12.06 min Scan# 1833
 Delta R.T. 0.00 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Tgt Ion	Ratio	Resp	Lower	Upper
119	100	11673		
134	29.3	0.0	53.8	
91	29.5	0.0	45.0	





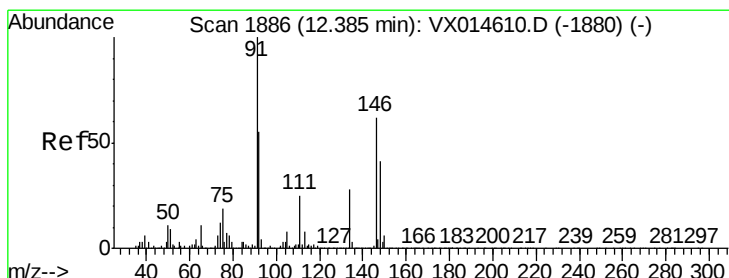
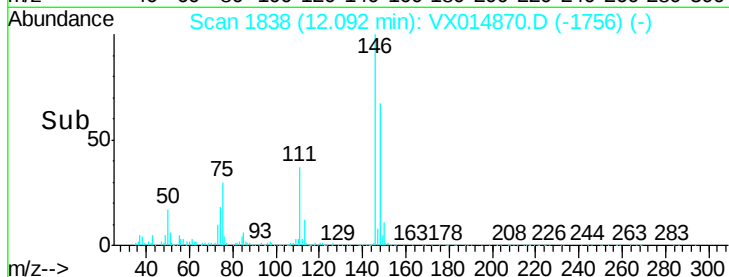
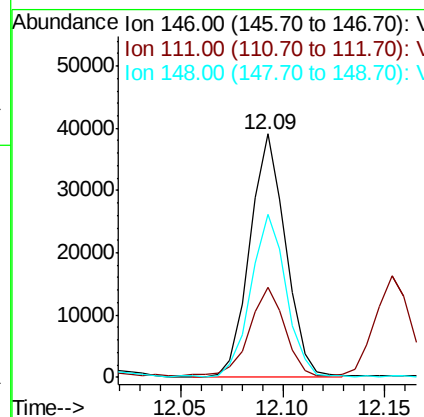
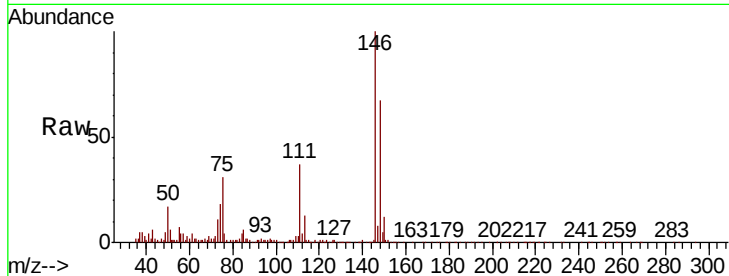
#84
 1,4-Dichlorobenzene
 Concen: 5.402 ug/l
 RT: 12.09 min Scan# 1838
 Delta R.T. 0.00 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Instrument :
 MSVOA_X
 ClientSampleId :
 400205799-VOA

Tot Ion	Ratio	Lower	Upper
146	100		
111	36.1	18.4	55.4
148	65.7	32.0	96.0

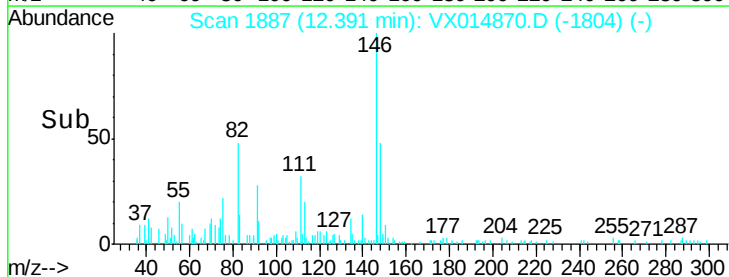
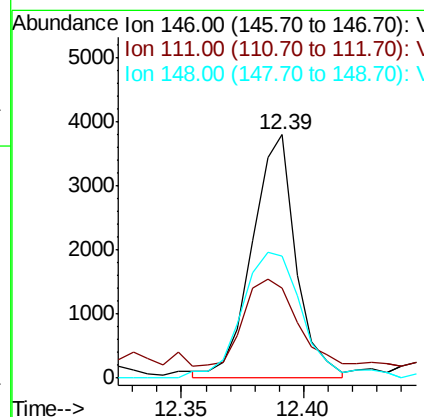
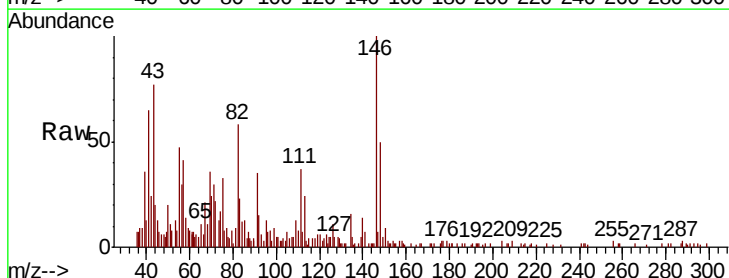
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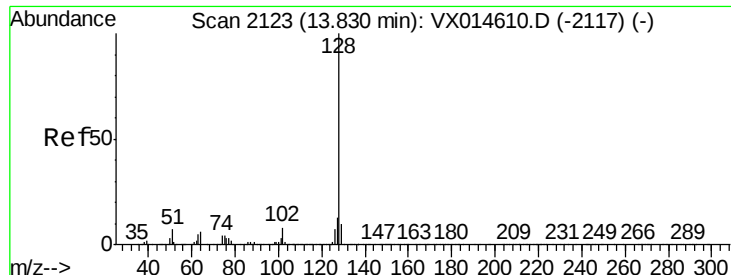
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#87
 1,2-Dichlorobenzene
 Concen: 0.528 ug/l
 RT: 12.39 min Scan# 1887
 Delta R.T. 0.01 min
 Lab File: VX014870.D
 Acq: 07 Feb 2020 14:51

Tgt Ion	Ratio	Lower	Upper
146	100		
111	42.7	20.1	60.2
148	69.3	32.0	96.2





#91
Naphthalene
Concen: 2.169 ug/l
RT: 13.83 min Scan# 2123
Delta R.T. 0.00 min
Lab File: VX014870.D
Acq: 07 Feb 2020 14:51

Instrument :
MSVOA_X
ClientSampleId :
400205799-VOA

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	13.7	10.4	15.6
129	11.9	8.9	13.3

Manual Integrations
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2/10/2020 10:49:36 AM

