

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX041020\
 Data File : VX015619.D
 Acq On : 10 Apr 2020 14:26
 Operator : JC/SP
 Sample : L2209-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 400408744.2-VOA

Manual Integrations
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Quant Time: Apr 13 03:38:47 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X032520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Mar 26 02:31:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.99	128	112833	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.83	114	617080	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	568371	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.03	65	283282	32.13	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	107.10%
60) 4-Bromofluorobenzene	11.12	95	278575	28.64	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	95.47%
63) Toluene-d8	8.70	98	738898	30.60	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	102.00%

Target Compounds

					Ovalue
8) Diethyl Ether	2.17	74	40637	11.553	ug/l 95
15) Acetone	2.42	58	16025	16.374	ug/l 97
23) tert-Butyl Alcohol	3.00	59	1076917	568.850	ug/l # 100
24) Methyl tert-Butyl Ether	3.17	73	24380	1.069	ug/l 90
34) Benzene	6.12	78	76048	2.846	ug/l 99
45) 1,4-Dioxane	7.71	88	85375	476.343	ug/l 94
62) Toluene	8.76	91	44840	1.558	ug/l 99
64) Chlorobenzene	10.12	112	250598	13.539	ug/l 99
66) Ethyl Benzene	10.24	91	291835	8.874	ug/l 99
67) m/p-Xylenes	10.34	106	54377	4.368	ug/l 99
68) o-Xylene	10.68	106	45318	3.725	ug/l 99
70) Isopropylbenzene	11.00	105	49525	1.535	ug/l 95
74) n-propylbenzene	11.34	91	34596	0.935	ug/l 97
75) 2-Chlorotoluene	11.40	91	22102	0.982	ug/l 93
76) 1,3,5-Trimethylbenzene	11.49	105	13884	0.501	ug/l 91
77) t-1,4-Dichloro-2-butene	11.06	75	3175m	0.753	ug/l
78) 4-Chlorotoluene	11.49	91	6702	0.257	ug/l 88
80) 1,2,4-Trimethylbenzene	11.79	105	70541	2.514	ug/l 97
81) sec-Butylbenzene	11.93	105	10951	0.345	ug/l 84
82) p-Isopropyltoluene	12.05	119	15985	0.534	ug/l 90
83) 1,3-Dichlorobenzene	12.01	146	5860	0.376	ug/l 92
84) 1,4-Dichlorobenzene	12.08	146	153560	9.884	ug/l 99
85) n-Butylbenzene	12.37	91	13088	0.491	ug/l 81
87) 1,2-Dichlorobenzene	12.38	146	13068	0.860	ug/l 94
91) Naphthalene	13.82	128	467332	13.190	ug/l 99

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

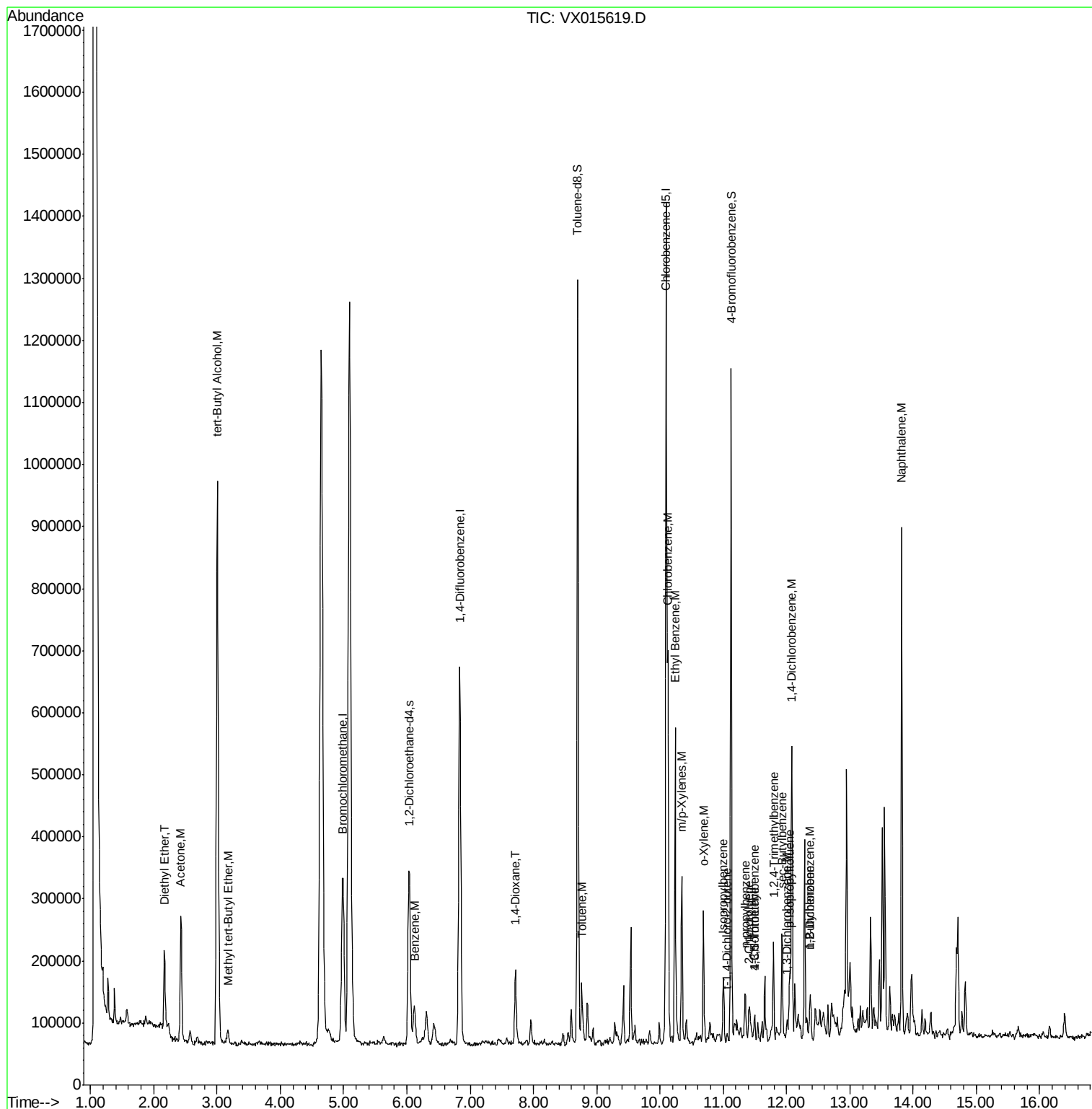
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX041020\
Data File : VX015619.D
Acq On : 10 Apr 2020 14:26
Operator : JC/SP
Sample : L2209-01
Misc : 5.0mL/MSVOA X/WATER
ALS Vial : 10 Sample Multiplier: 1

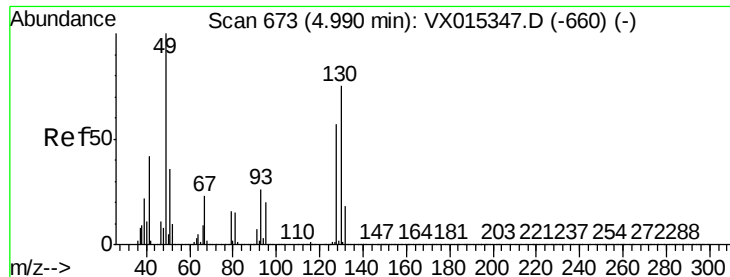
Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Manual Integrations
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Quant Time: Apr 13 03:38:47 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA X\METHOD\624X032520W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu Mar 26 02:31:53 2020
Response via : Initial Calibration





#1

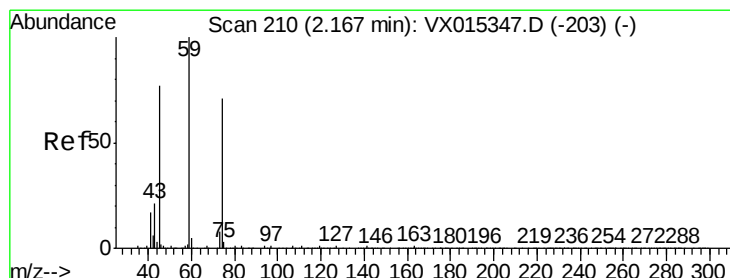
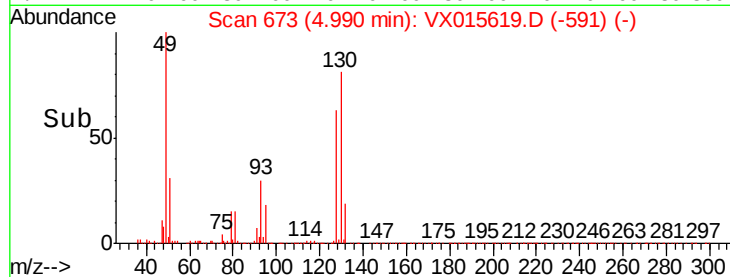
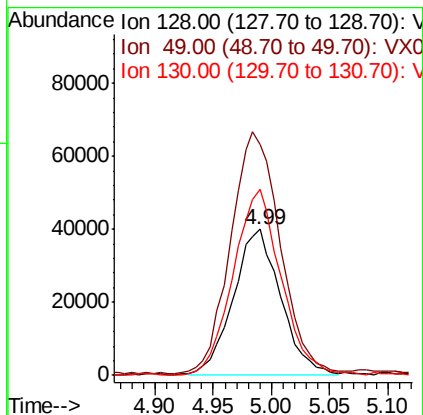
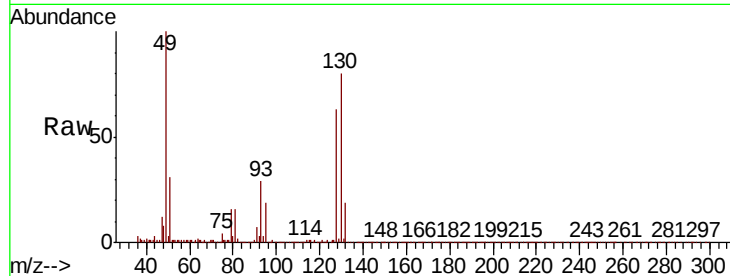
Bromochloromethane
 Concen: 30.000 ug/l
 RT: 4.99 min Scan# 673
 Delta R.T. -0.00 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Instrument :
 MSVOA_X
 ClientSampleId :
 400408744.2-VOA

Tot Ion	Ratio	Resp	Lower	Upper
128	100	112833		
49	173.8	0.0	428.0	
130	129.4	0.0	324.5	

Manual Integrations
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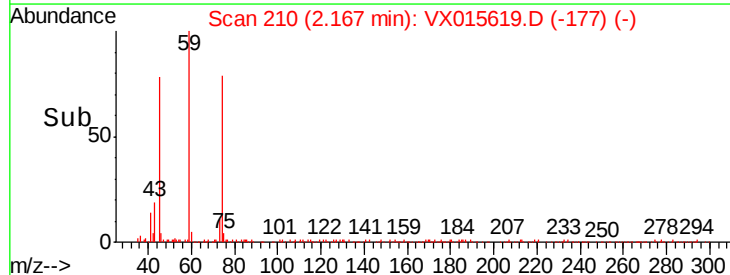
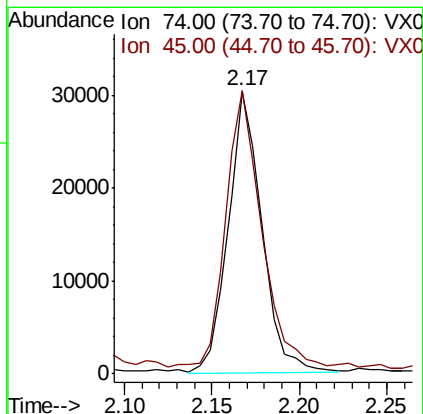
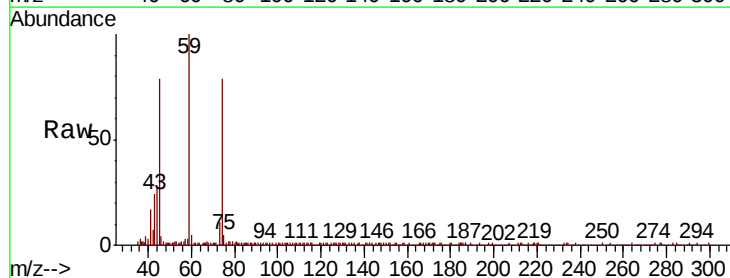
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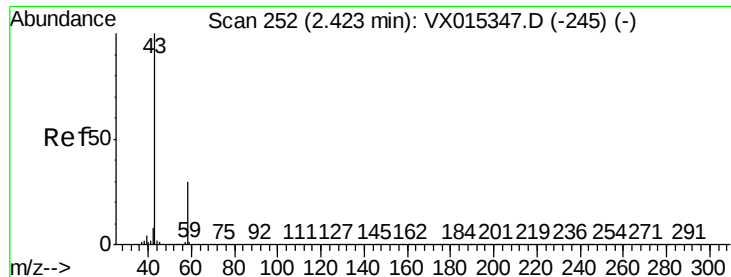


#8

Diethyl Ether
 Concen: 11.553 ug/l
 RT: 2.17 min Scan# 210
 Delta R.T. -0.00 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Resp	Lower	Upper
74	100	40637		
45	103.4	21.8	196.4	





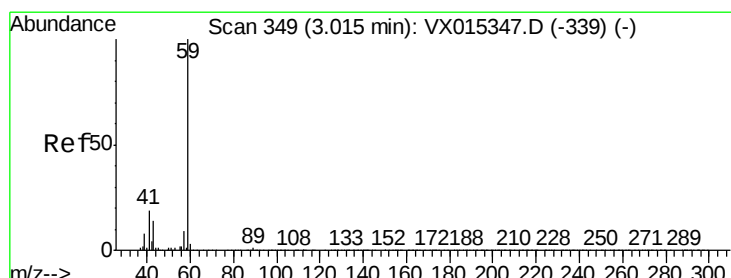
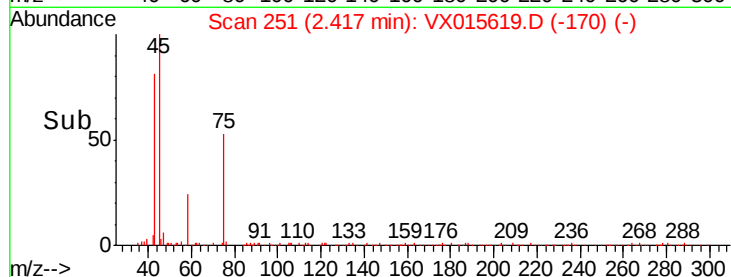
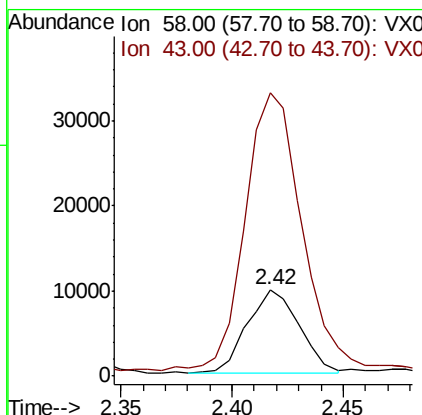
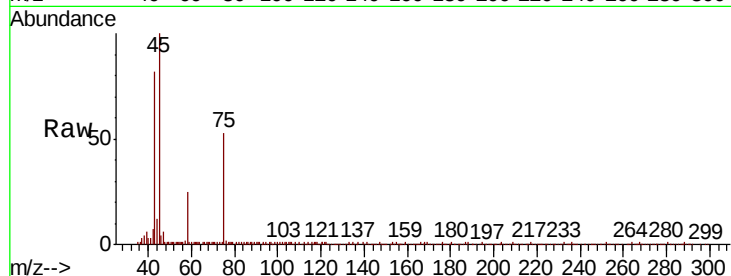
#15
Acetone
Concen: 16.374 ug/l
RT: 2.42 min Scan# 251
Delta R.T. -0.01 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion: 58 Resp: 16025
Ion Ratio Lower Upper
58 100
43 328.5 267.8 401.8

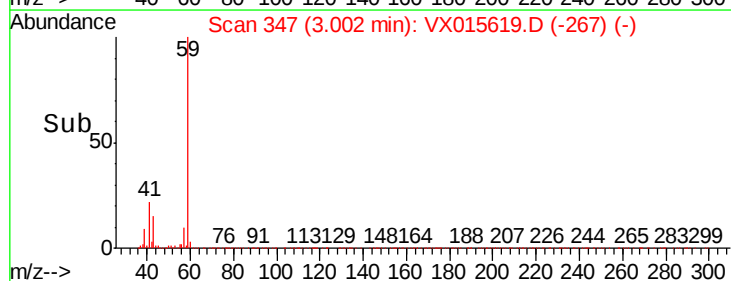
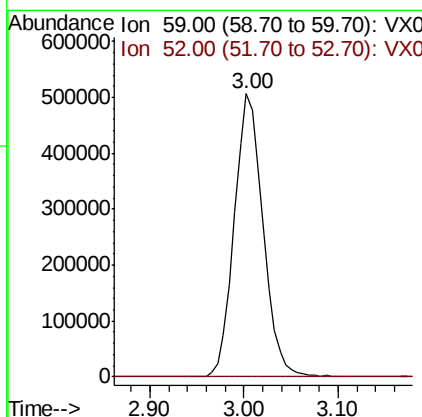
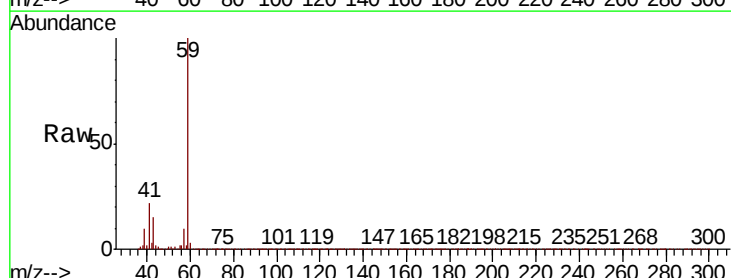
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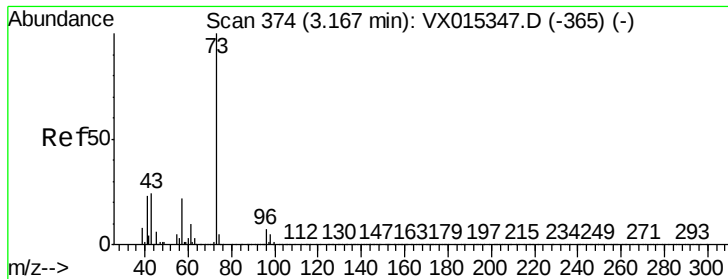
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#23
tert-Butyl Alcohol
Concen: 568.850 ug/l
RT: 3.00 min Scan# 347
Delta R.T. -0.01 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion: 59 Resp: 1076917
Ion Ratio Lower Upper
59 100
52 0.3 0.2 0.2#





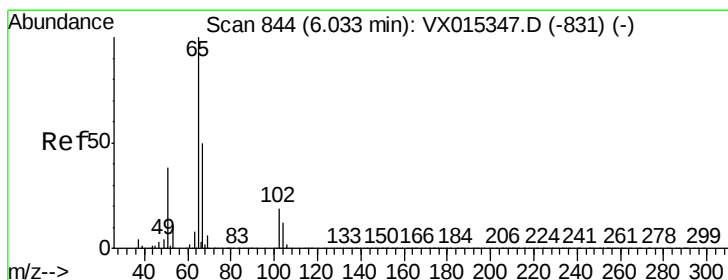
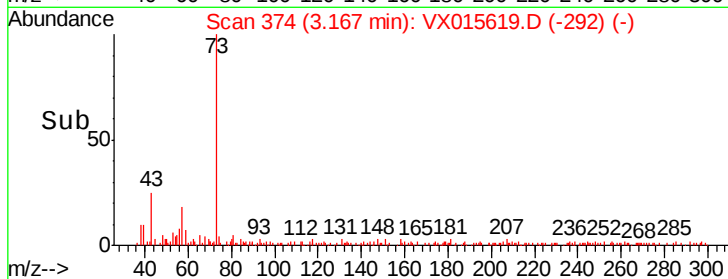
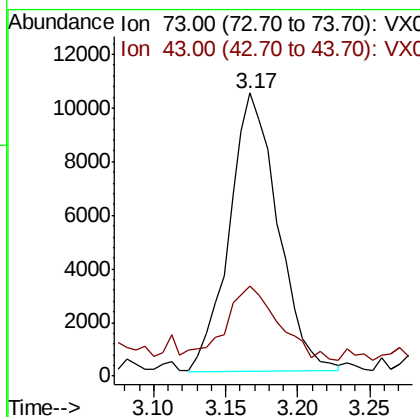
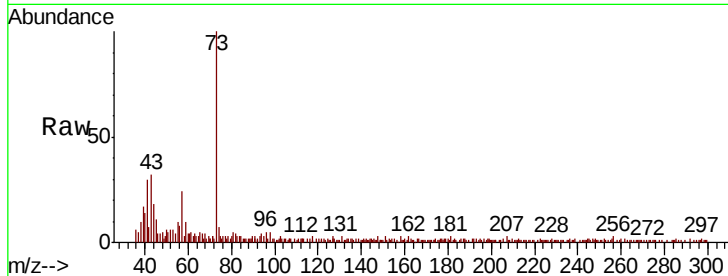
#24
Methvl tert-Butvl Ether
Concen: 1.069 ug/l
RT: 3.17 min Scan# 374
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
73	100		
43	28.8	19.2	28.8

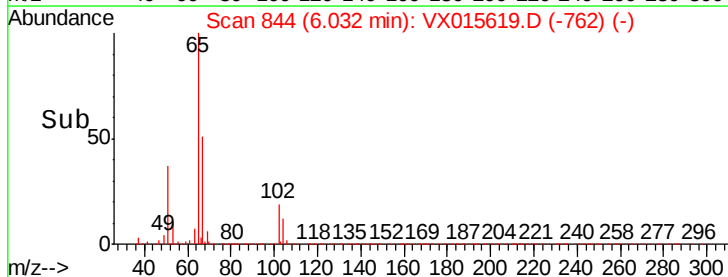
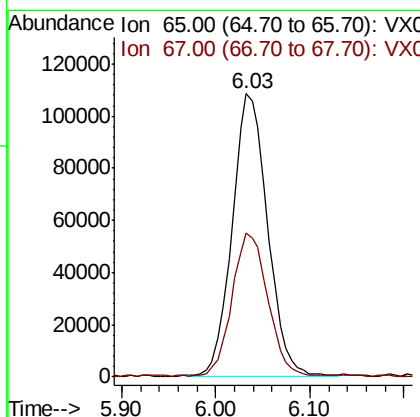
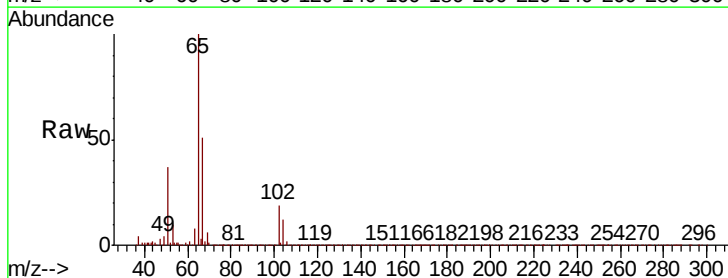
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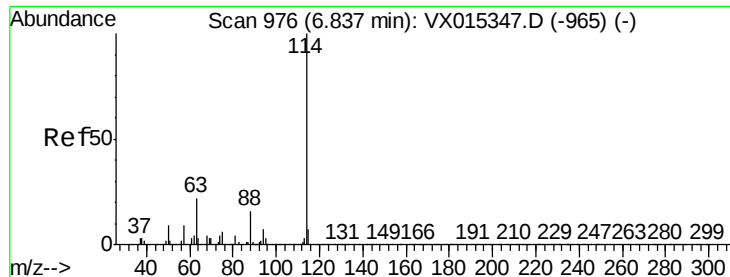
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#27
1,2-Dichloroethane-d4
Concen: 32.129 ug/l
RT: 6.03 min Scan# 844
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
65	100		
67	50.7	40.9	61.3





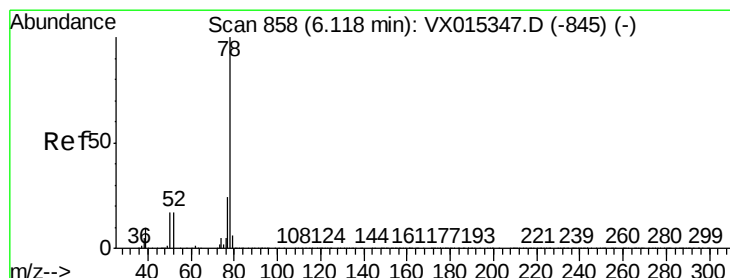
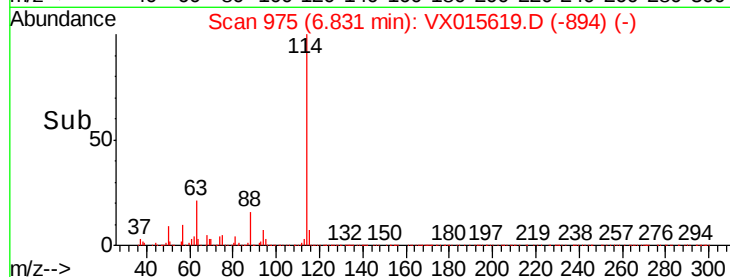
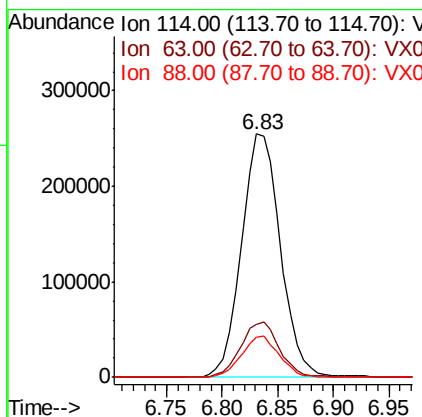
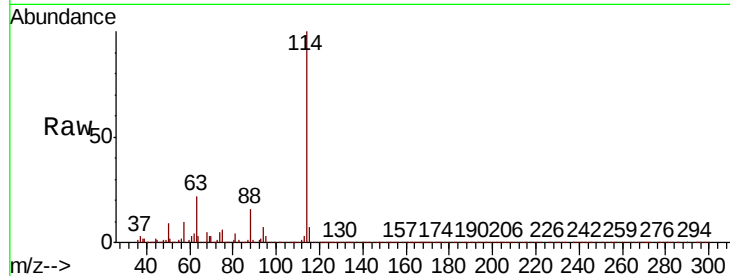
#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.83 min Scan# 975
 Delta R.T. -0.01 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Instrument :
 MSVOA_X
 ClientSampleId :
 400408744.2-VOA

Tot Ion:	114	Resp:	617080
Ion Ratio	Lower	Upper	
114	100		
63	22.2	17.4	26.2
88	16.5	12.9	19.3

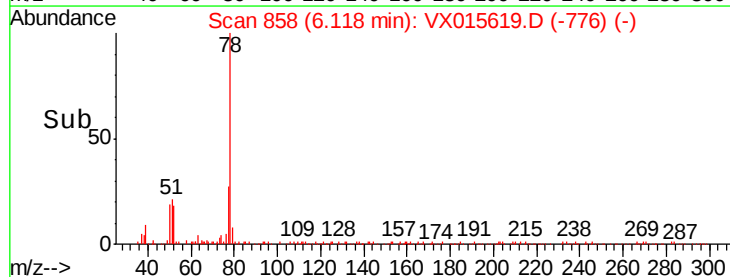
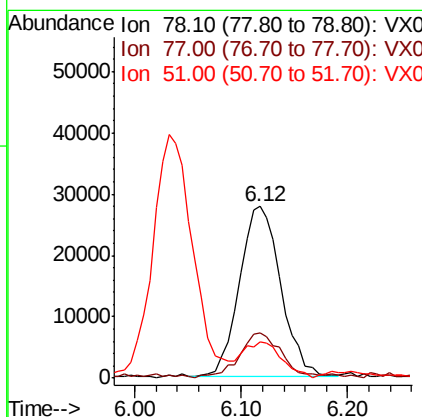
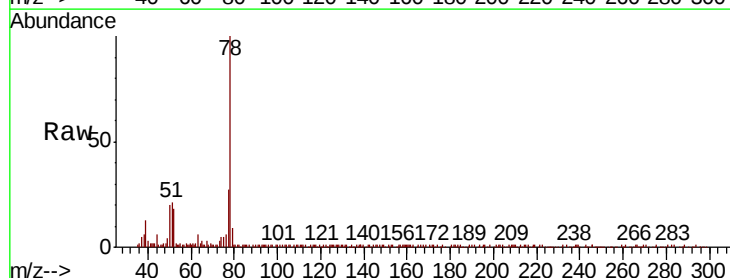
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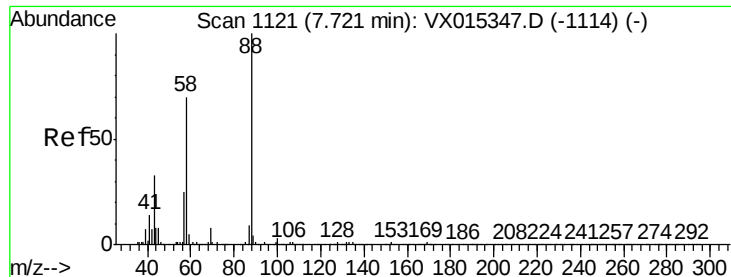
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#34
 Benzene
 Concen: 2.846 ug/l
 RT: 6.12 min Scan# 858
 Delta R.T. -0.00 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Tgt Ion:	78	Resp:	76048
Ion Ratio	Lower	Upper	
78	100		
77	25.4	19.4	29.2
51	18.1	14.6	21.8





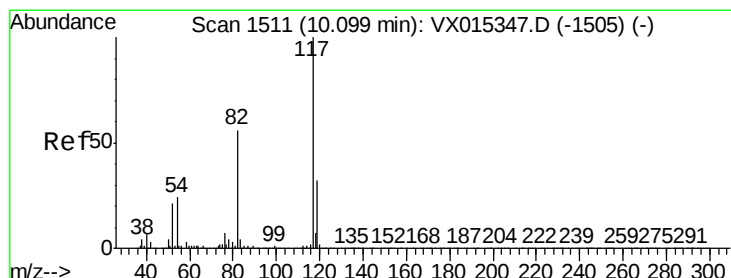
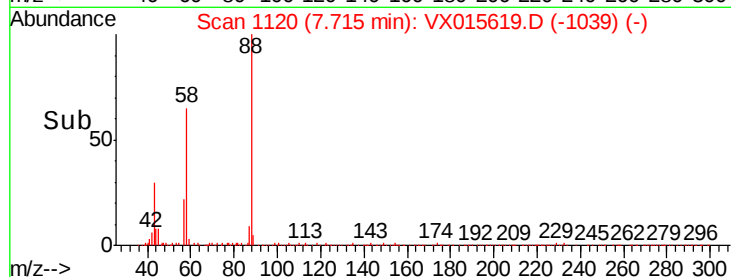
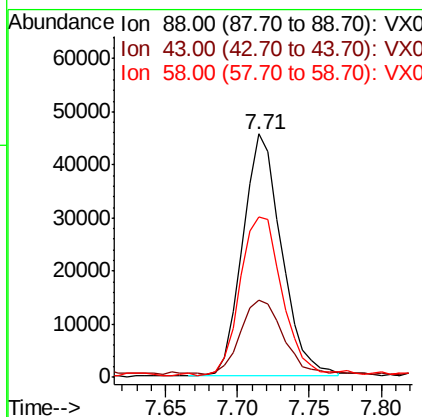
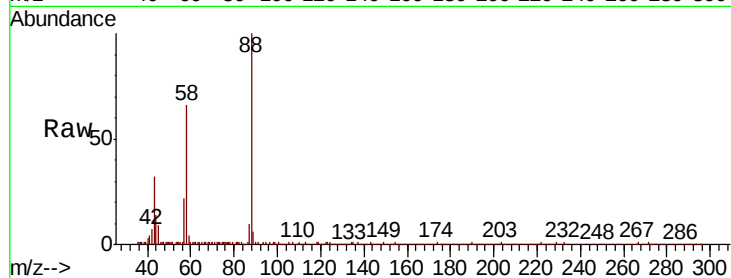
#45
1,4-Dioxane
Concen: 476.343 ug/l
RT: 7.71 min Scan# 1120
Delta R.T. -0.01 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion:	88	Resp:	85375
Ion Ratio	Lower	Upper	
88	100		
43	33.5	32.1	48.1
58	70.8	59.4	89.0

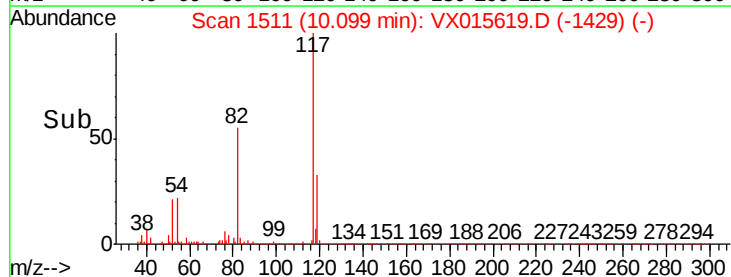
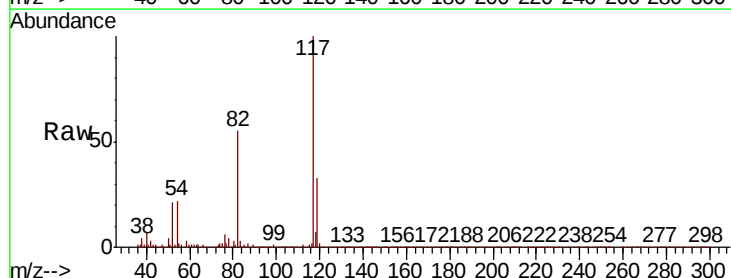
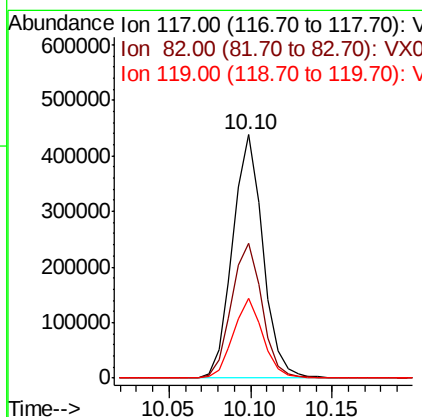
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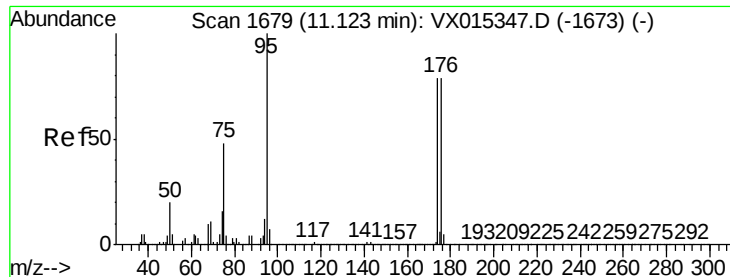
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#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.10 min Scan# 1511
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion:	117	Resp:	568371
Ion Ratio	Lower	Upper	
117	100		
82	56.3	45.0	67.6
119	32.0	25.5	38.3





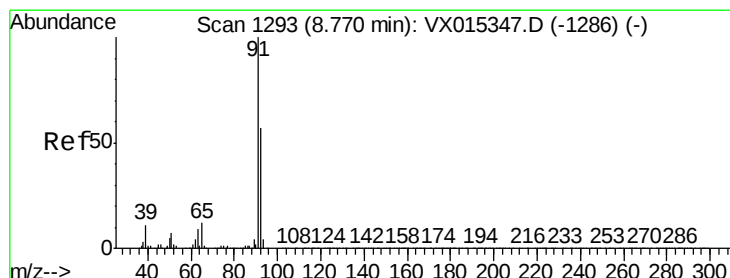
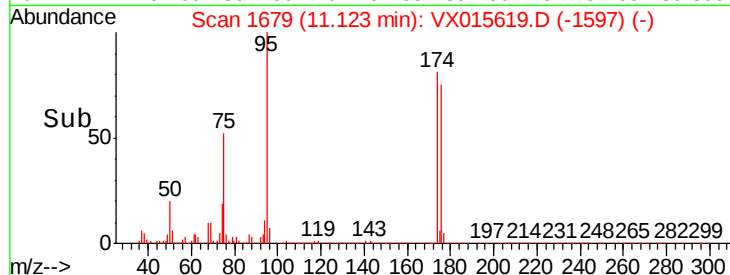
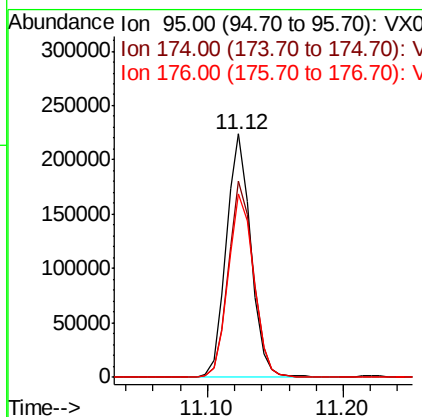
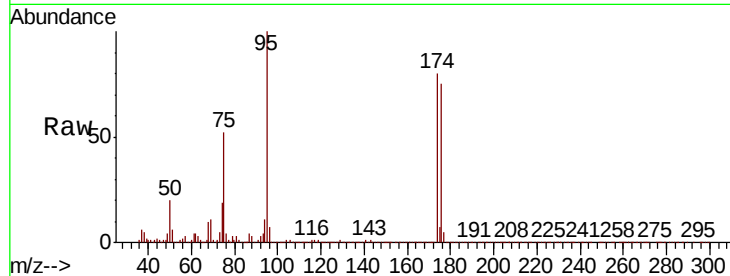
#60
4-Bromofluorobenzene
Concen: 28.639 ug/l
RT: 11.12 min Scan# 1679
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Resp Lower	Upper
95	100		
174	82.3	66.4	99.6
176	78.7	64.1	96.1

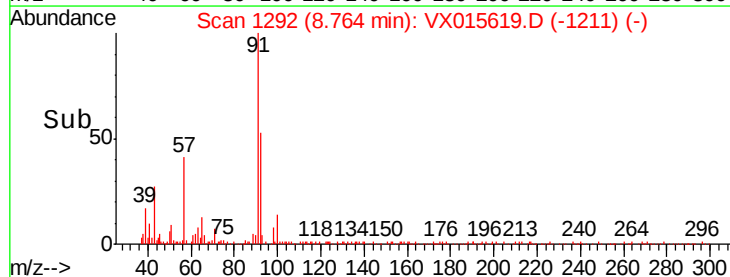
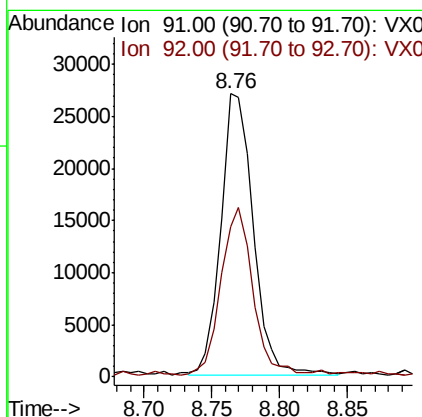
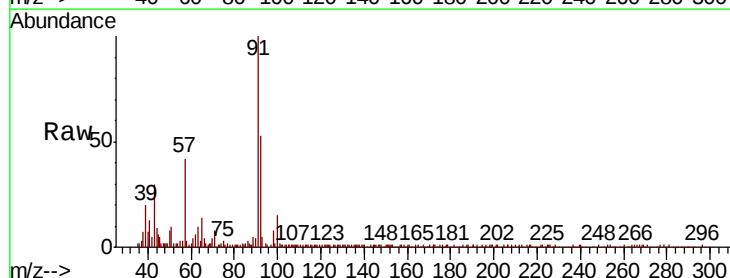
Manual Integrations
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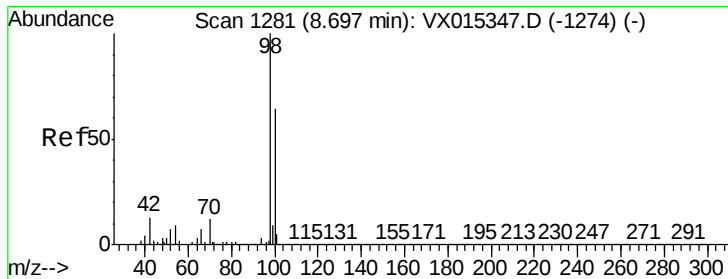
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#62
Toluene
Concen: 1.558 ug/l
RT: 8.76 min Scan# 1292
Delta R.T. -0.01 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Resp Lower	Upper
91	100		
92	57.4	46.7	70.1





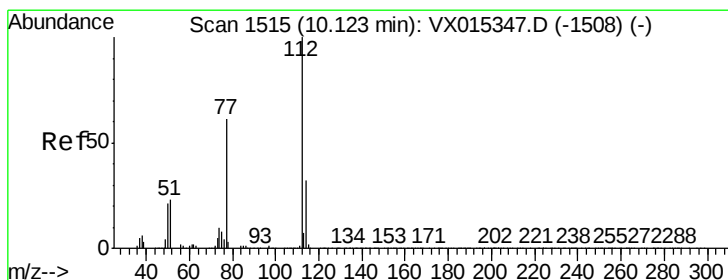
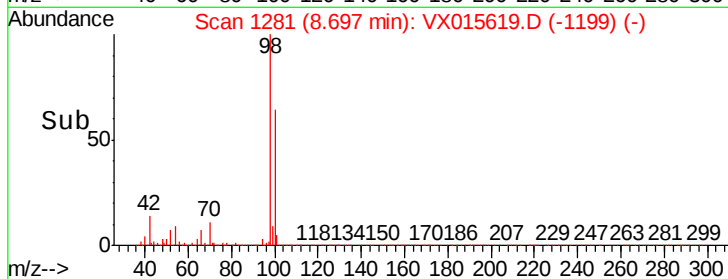
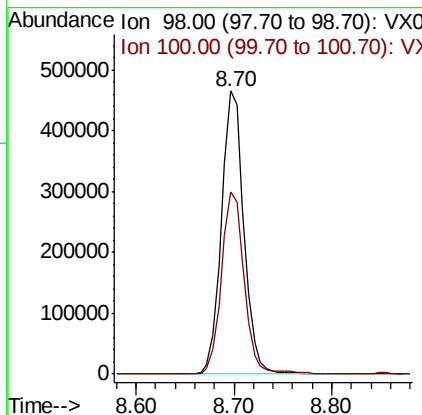
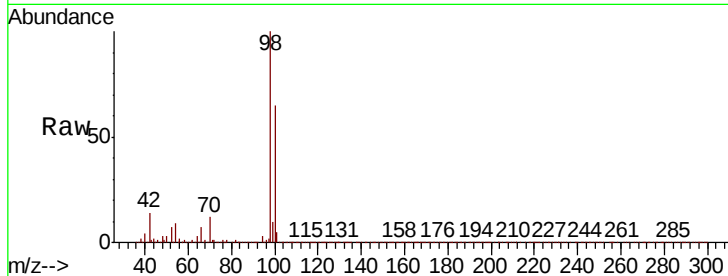
#63
Toluene-d8
Concen: 30.599 ug/l
RT: 8.70 min Scan# 1281
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
98	100		
100	64.6	52.2	78.2

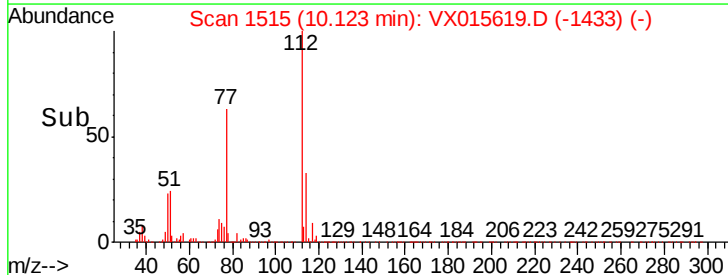
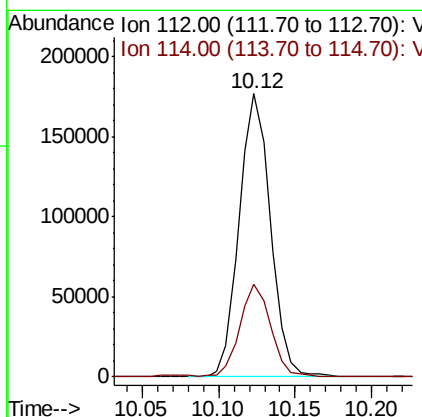
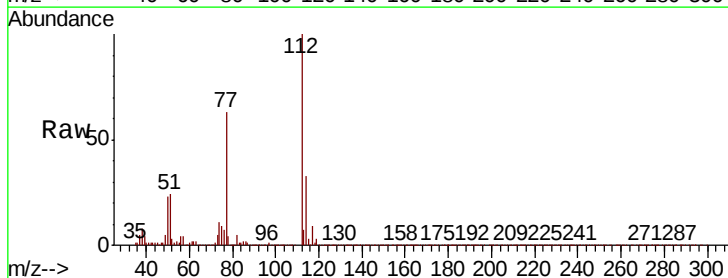
Manual Integrations
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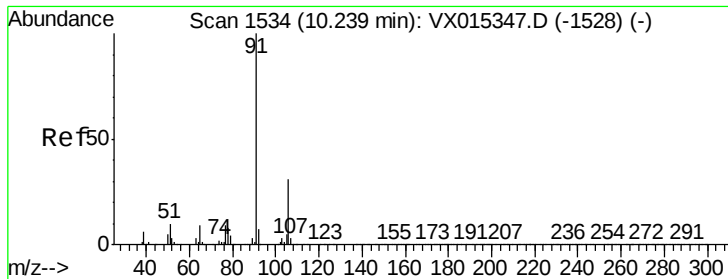
apatel
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#64
Chlorobenzene
Concen: 13.539 ug/l
RT: 10.12 min Scan# 1515
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
112	100		
114	32.8	25.8	38.8





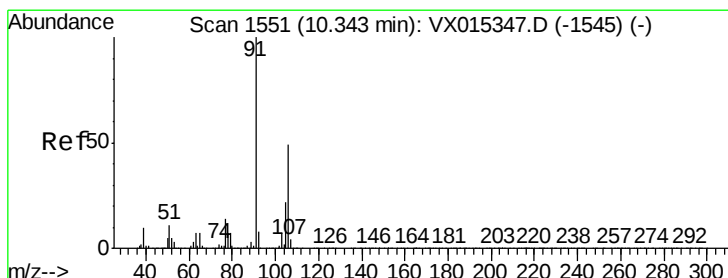
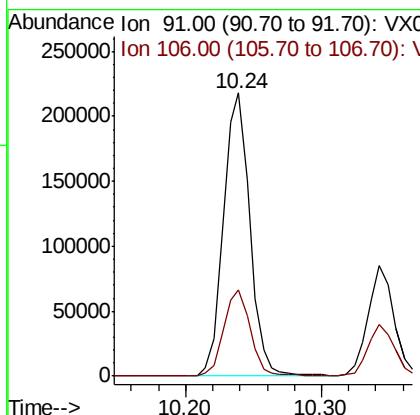
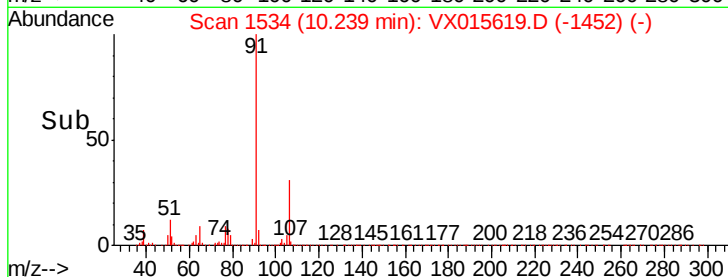
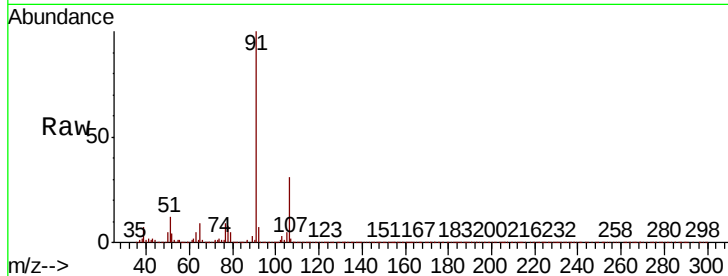
#66
Ethyl Benzene
Concen: 8.874 ug/l
RT: 10.24 min Scan# 1534
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
91	100		
106	30.7	25.0	37.6

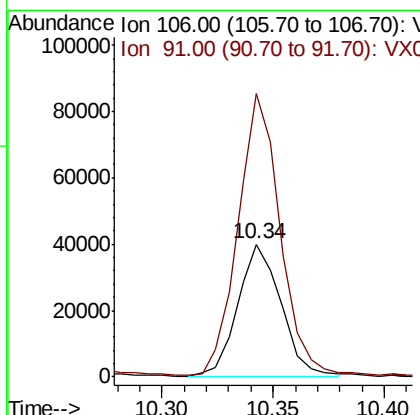
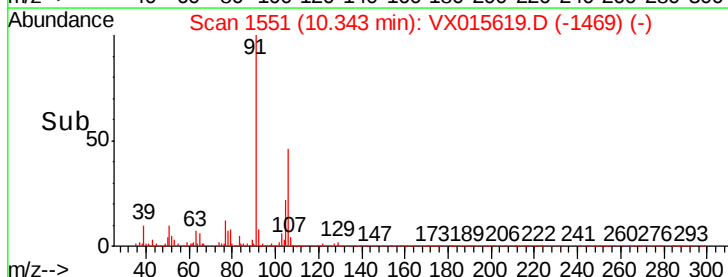
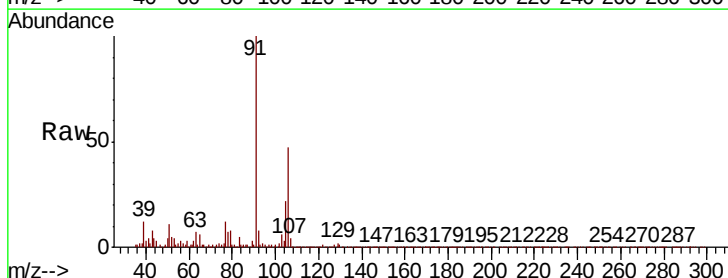
Manual Integrations
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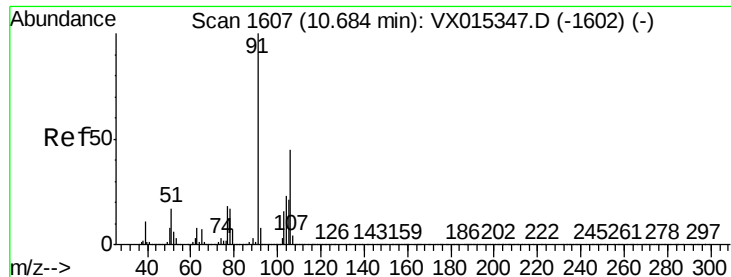
apatel
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#67
m/p-Xylenes
Concen: 4.368 ug/l
RT: 10.34 min Scan# 1551
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
106	100		
91	207.4	165.0	247.4





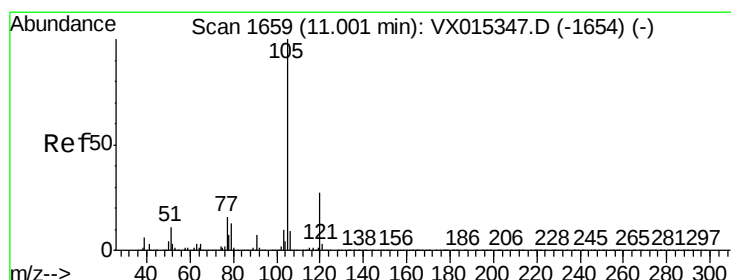
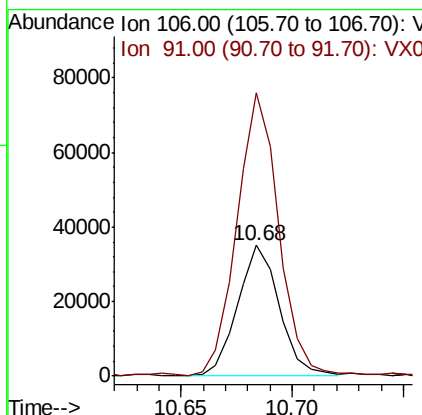
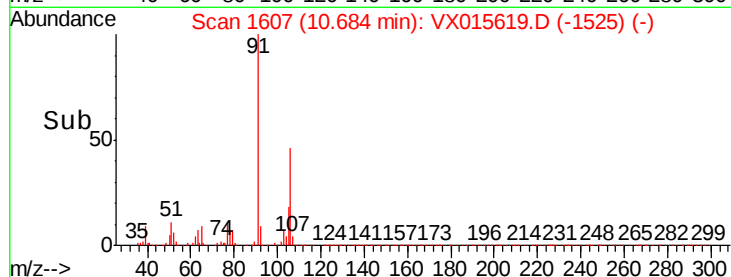
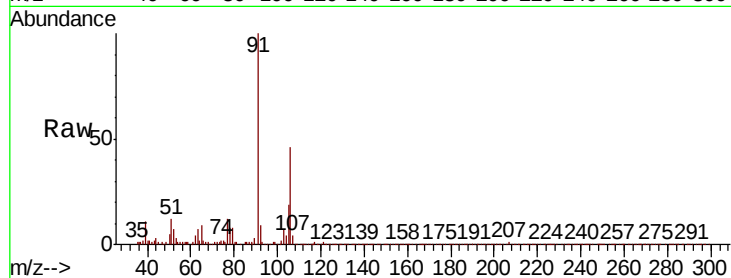
#68
o-Xylene
Concen: 3.725 ug/l
RT: 10.68 min Scan# 1607
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
106	100		
91	217.2	109.1	327.2

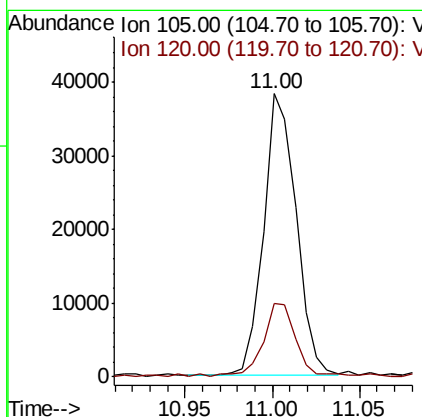
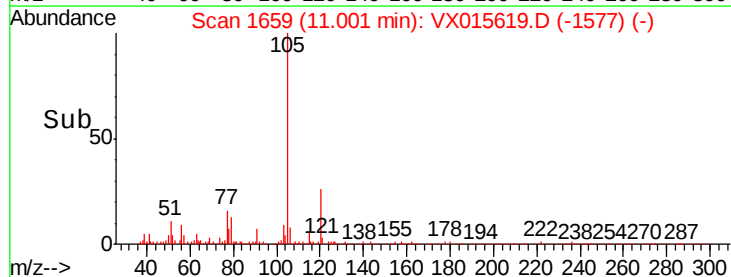
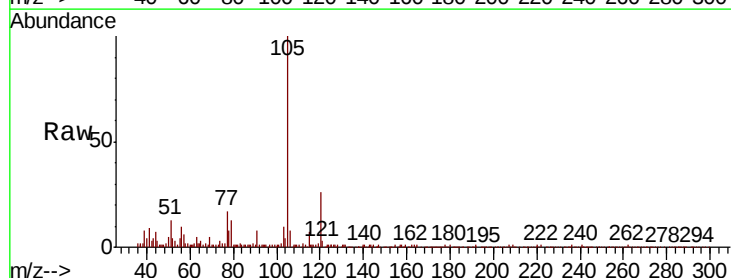
Manual Integrations
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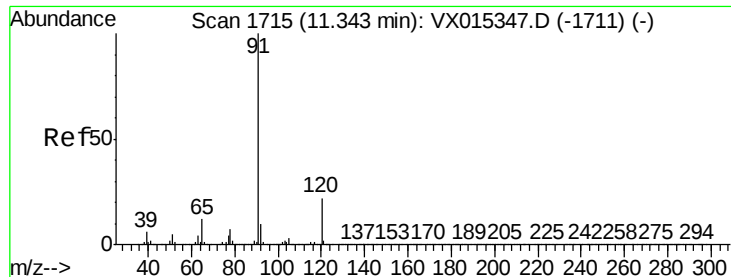
apatel
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#70
Isopropylbenzene
Concen: 1.535 ug/l
RT: 11.00 min Scan# 1659
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.3	18.8	34.8





#74

n-propylbenzene

Concen: 0.935 ug/l

RT: 11.34 min Scan# 1715

Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Instrument :

MSVOA_X

ClientSampleId :

400408744.2-VOA

Tot Ion: 91 Resp: 34596

Ion Ratio Lower Upper

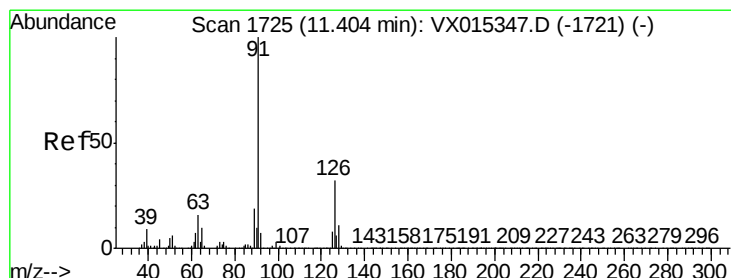
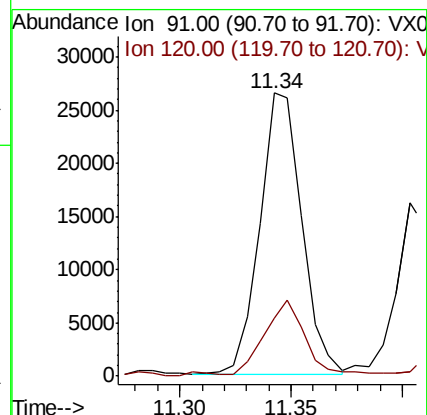
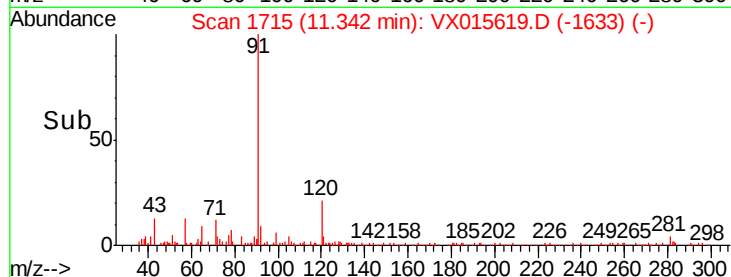
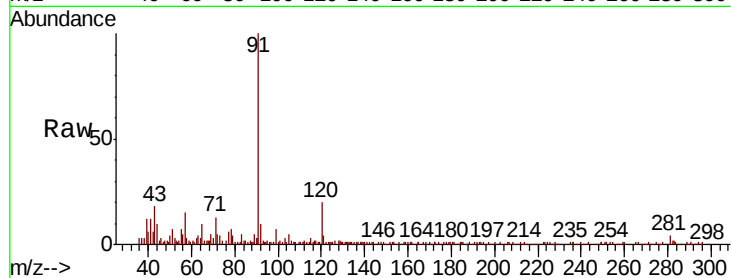
91 100

120 24.6 0.0 46.2

Manual Integrations
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#75

2-Chlorotoluene

Concen: 0.982 ug/l

RT: 11.40 min Scan# 1725

Delta R.T. -0.00 min

Lab File: VX015619.D

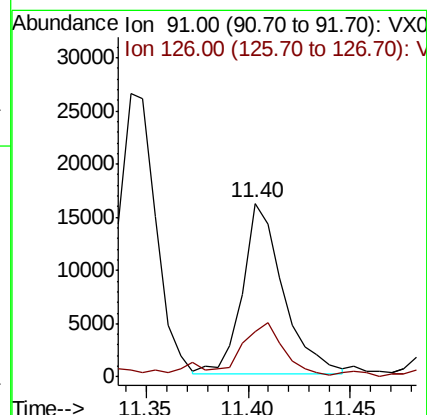
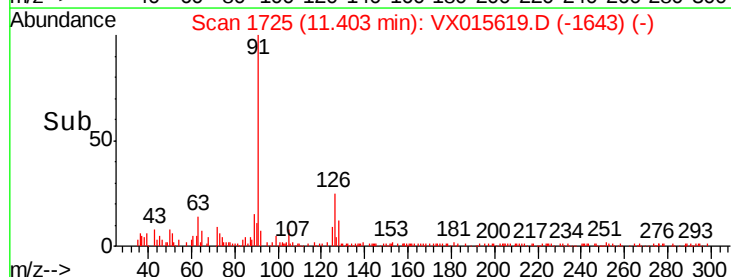
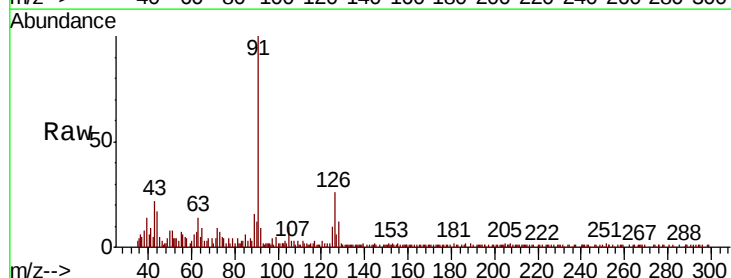
Acq: 10 Apr 2020 14:26

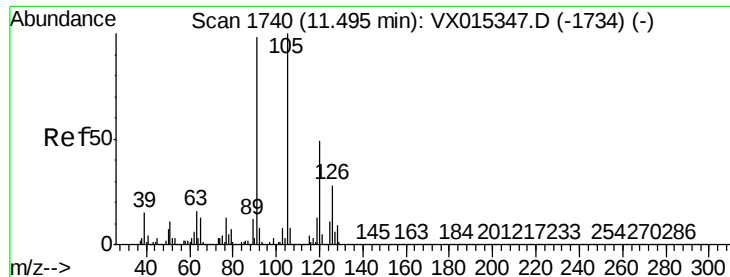
Tgt Ion: 91 Resp: 22102

Ion Ratio Lower Upper

91 100

126 28.7 0.0 65.2





#76

1,3,5-Trimethylbenzene

Concen: 0.501 ug/l

RT: 11.49 min Scan# 1740

Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Instrument :

MSVOA_X

ClientSampleId :

400408744.2-VOA

Tot Ion:105 Resp: 13884

Ion Ratio Lower Upper

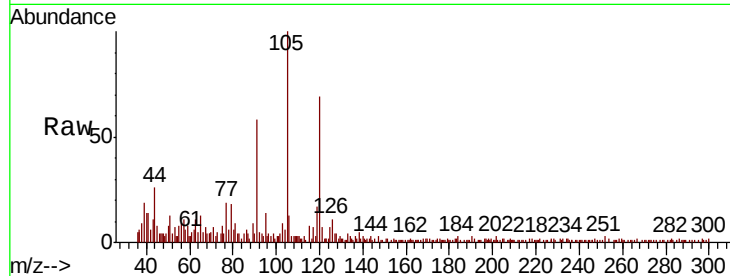
105 100

120 55.1 0.0 98.0

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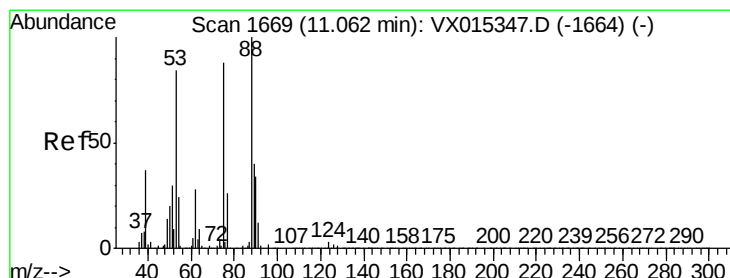
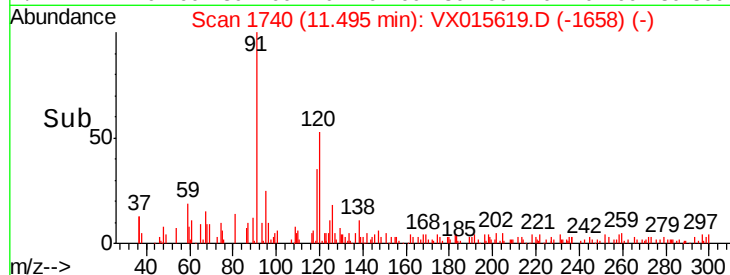
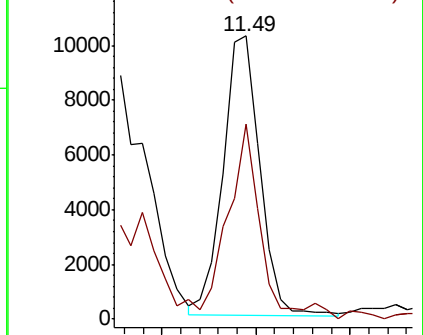
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Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#77

t-1,4-Dichloro-2-butene

Concen: 0.753 ug/l m

RT: 11.06 min Scan# 1668

Delta R.T. -0.01 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

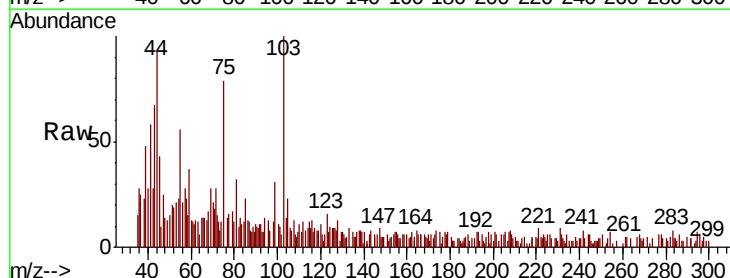
Tgt Ion: 75 Resp: 3175

Ion Ratio Lower Upper

75 100

53 25.9 47.5 142.6#

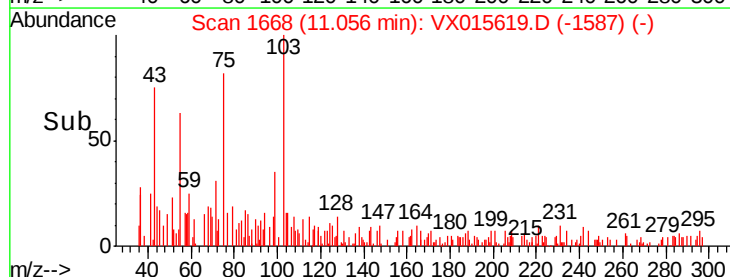
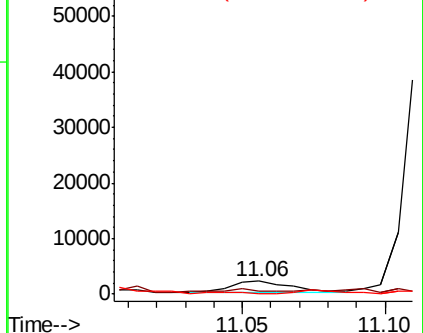
89 8.2 22.8 68.3#

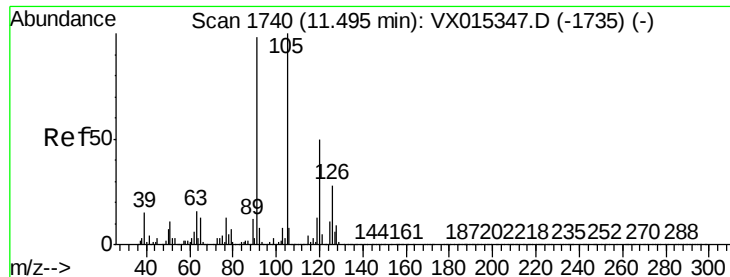


Abundance Ion 75.00 (74.70 to 75.70): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 89.00 (88.70 to 89.70): VX0





#78

4-Chlorotoluene

Concen: 0.257 ug/l

RT: 11.49 min Scan# 1740

Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Instrument :

MSVOA_X

ClientSampleId :

400408744.2-VOA

Tot Ion: 91 Resp: 6702

Ion Ratio Lower Upper

91 100

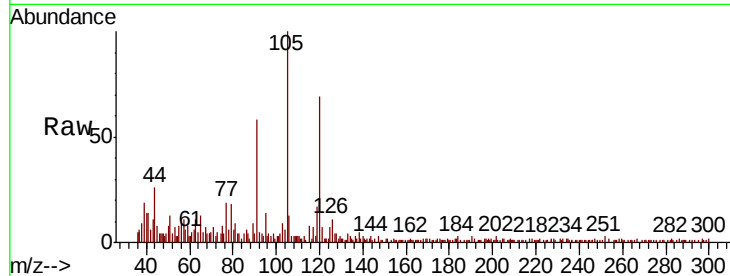
126 35.0 0.0 57.8

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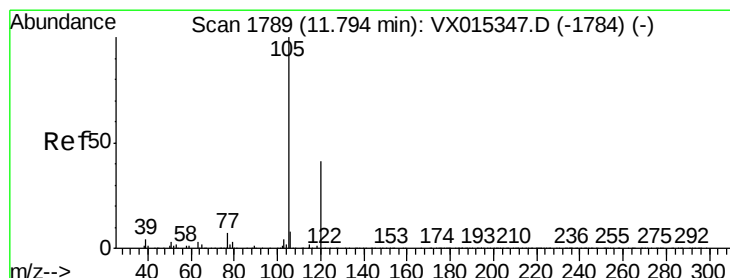
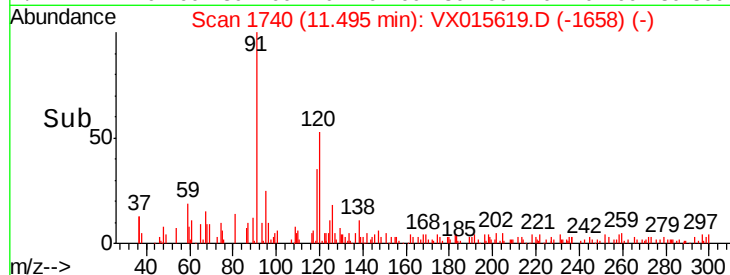
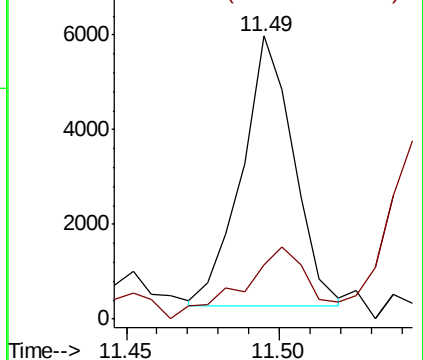
apatel

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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: 2.514 ug/l

RT: 11.79 min Scan# 1789

Delta R.T. -0.00 min

Lab File: VX015619.D

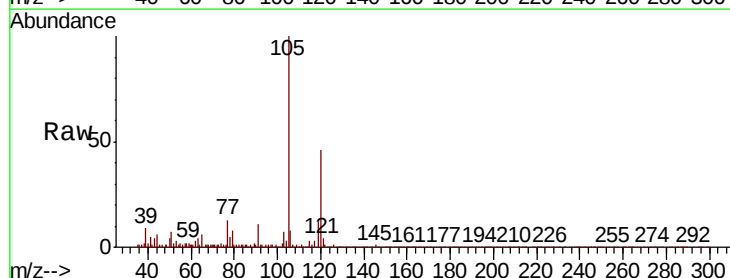
Acq: 10 Apr 2020 14:26

Tgt Ion: 105 Resp: 70541

Ion Ratio Lower Upper

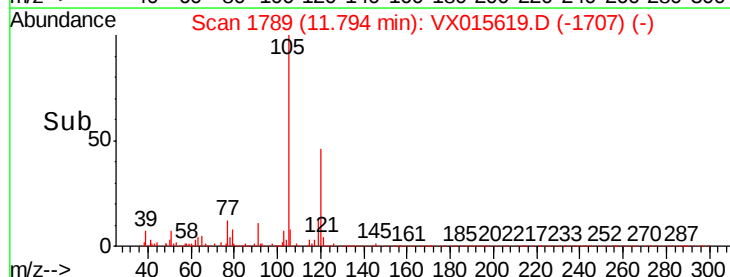
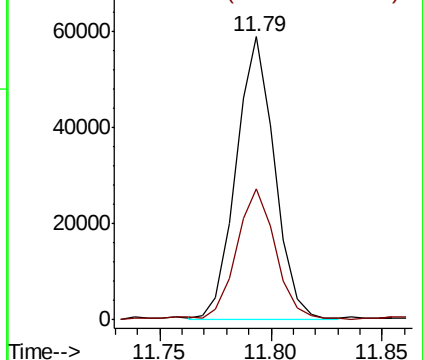
105 100

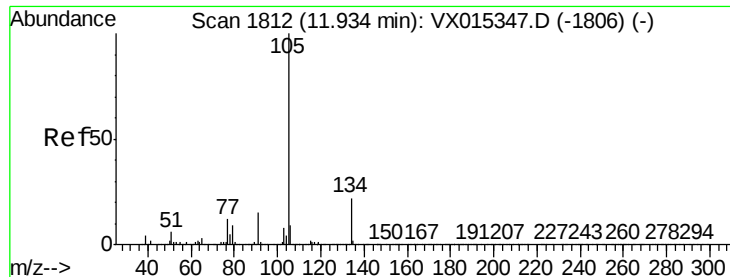
120 47.2 0.0 91.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#81

sec-Butylbenzene

Concen: 0.345 ug/l

RT: 11.93 min Scan# 1812

Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Instrument :

MSVOA_X

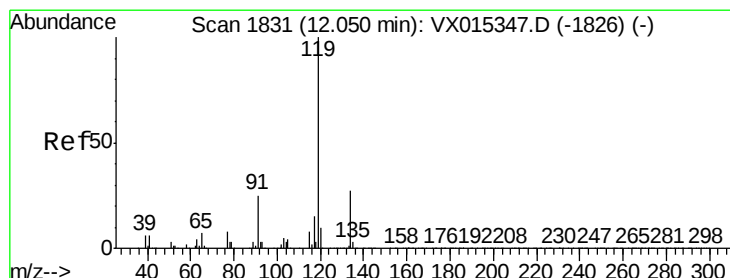
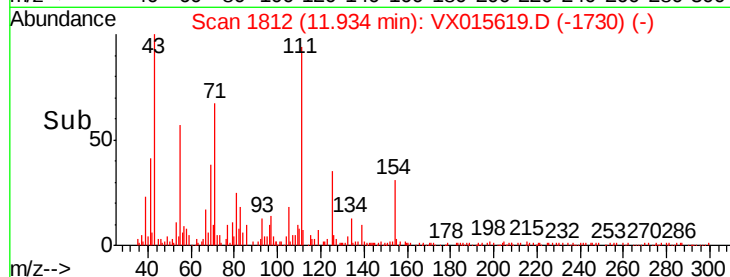
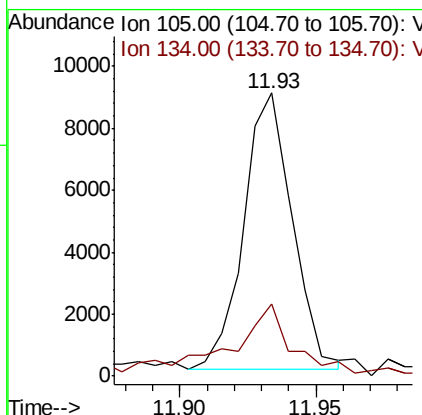
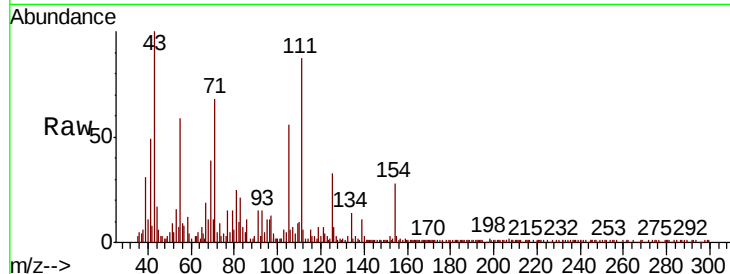
ClientSampleId :

400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
105	100		
134	28.2	0.0	41.6

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#82

p-Isopropyltoluene

Concen: 0.534 ug/l

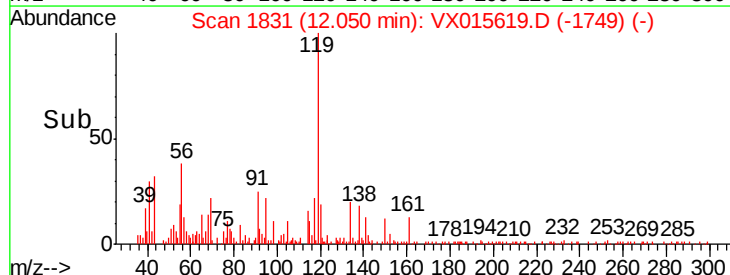
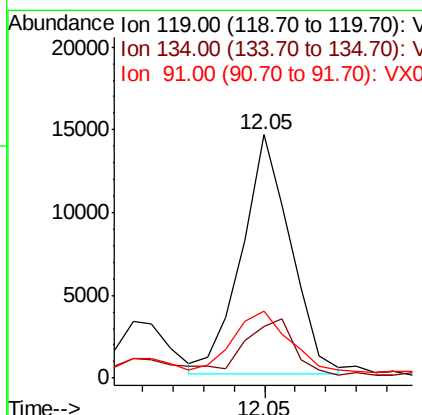
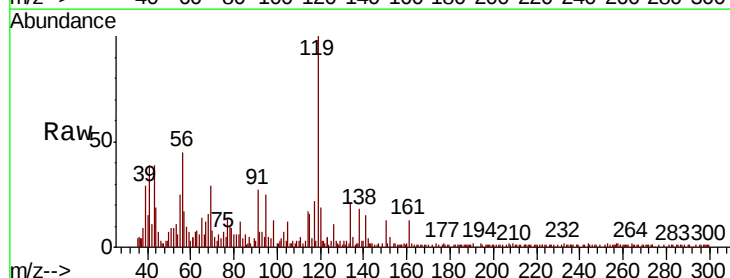
RT: 12.05 min Scan# 1831

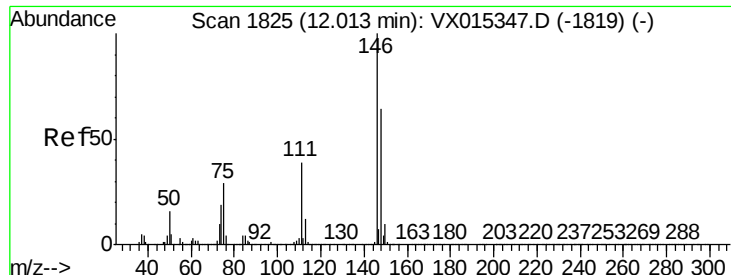
Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
119	100		
134	21.8	0.0	53.2
91	29.4	0.0	48.2





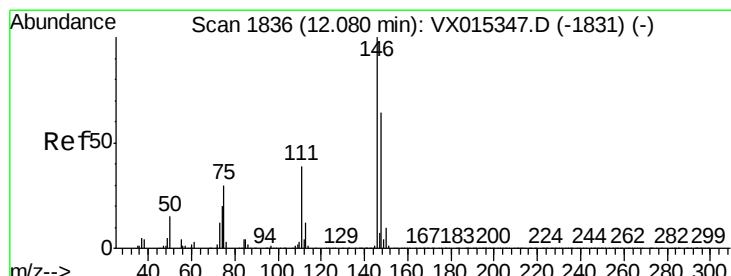
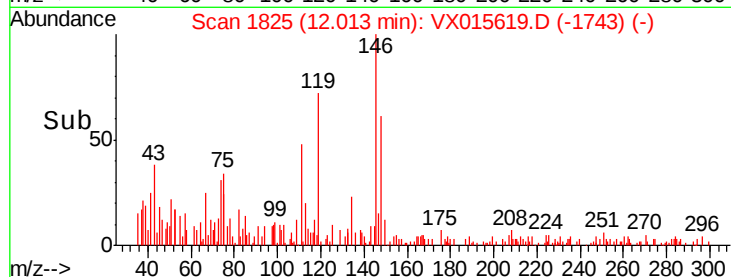
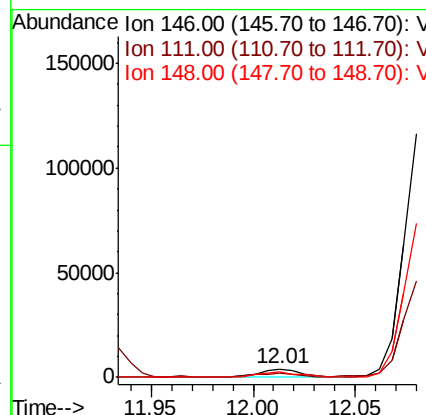
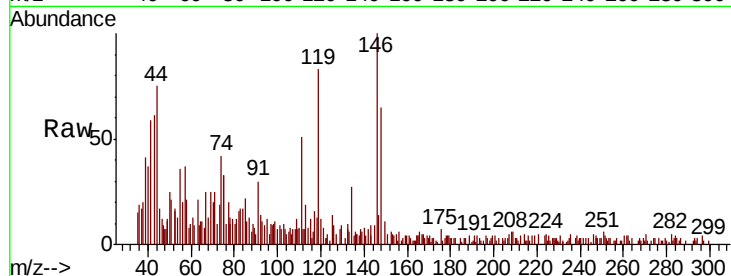
#83
 1,3-Dichlorobenzene
 Concen: 0.376 ug/l
 RT: 12.01 min Scan# 1825
 Delta R.T. -0.00 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Instrument :
 MSVOA_X
 ClientSampleId :
 400408744.2-VOA

Tot Ion	Ratio	Lower	Upper
146	100		
111	42.2	20.1	60.2
148	71.7	31.4	94.2

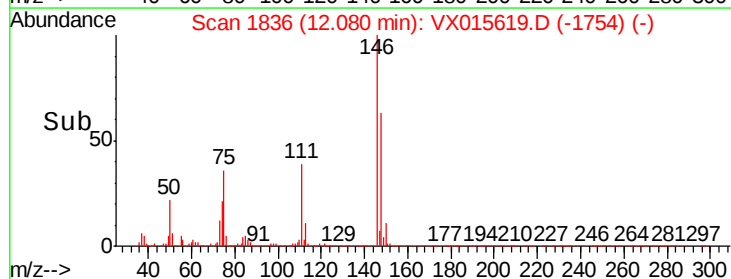
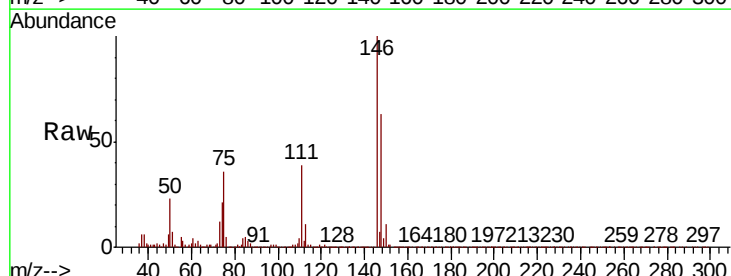
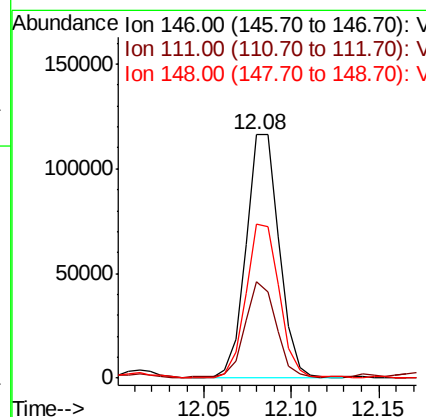
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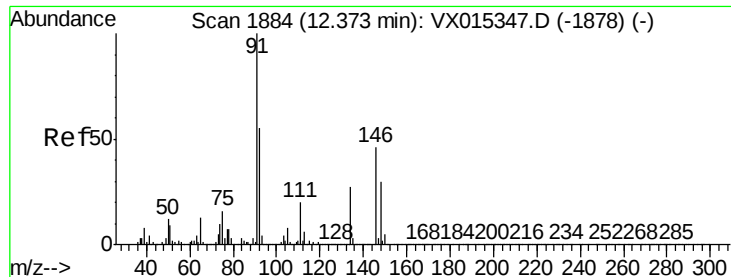
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#84
 1,4-Dichlorobenzene
 Concen: 9.884 ug/l
 RT: 12.08 min Scan# 1836
 Delta R.T. -0.00 min
 Lab File: VX015619.D
 Acq: 10 Apr 2020 14:26

Tgt Ion	Ratio	Lower	Upper
146	100		
111	36.8	18.9	56.9
148	63.1	31.4	94.3





#85

n-Butylbenzene

Concen: 0.491 ug/l

RT: 12.37 min Scan# 1884

Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Instrument :

MSVOA_X

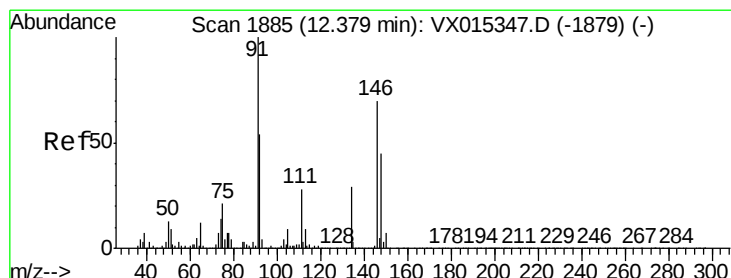
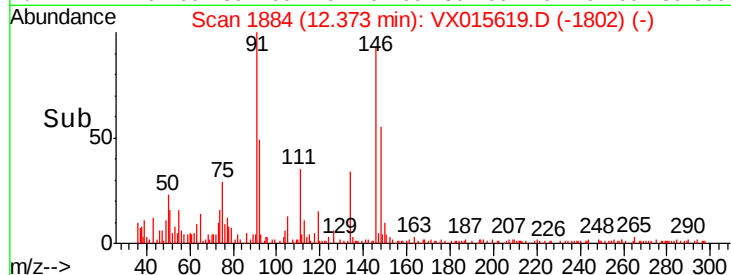
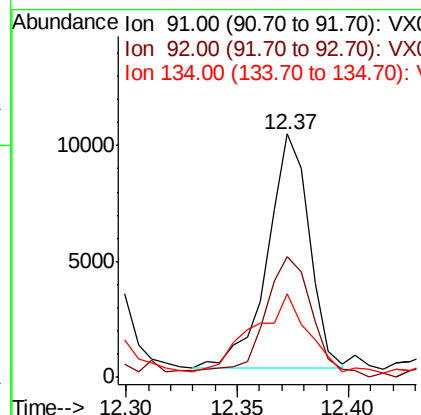
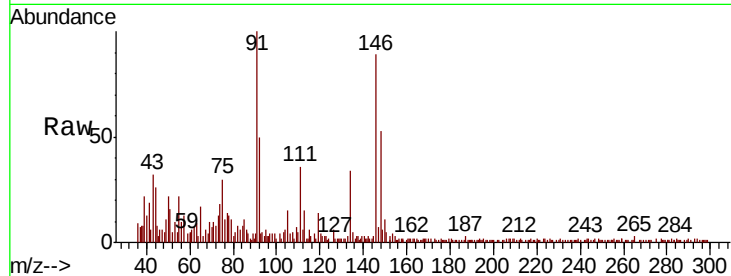
ClientSampled :

400408744.2-VOA

Tot Ion:	91	Resp:	13088
Ion Ratio	Lower	Upper	
91	100		
92	63.2	0.0	109.0
134	43.4	0.0	54.0

Manual Integrations
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#87

1,2-Dichlorobenzene

Concen: 0.860 ug/l

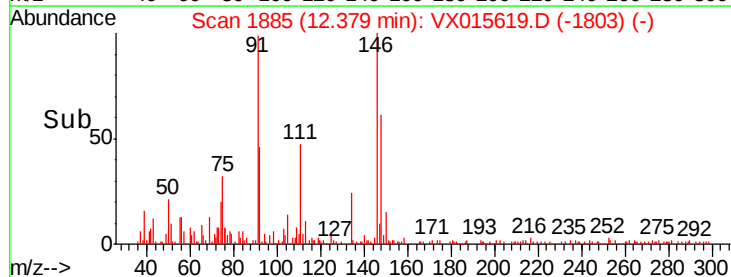
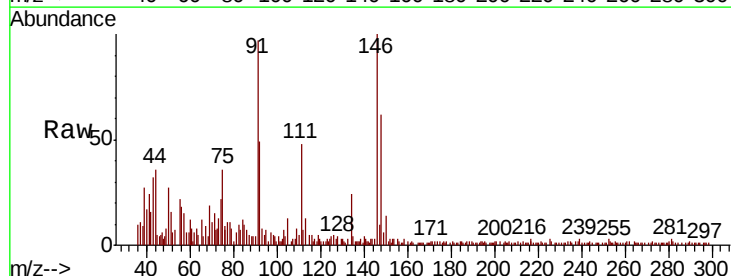
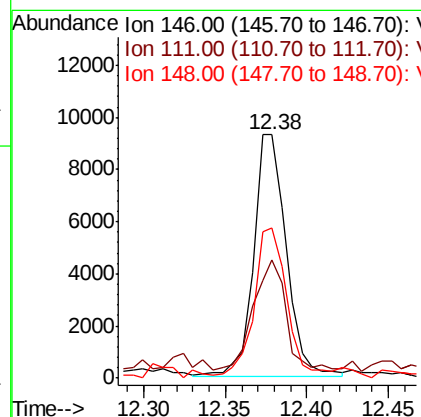
RT: 12.38 min Scan# 1885

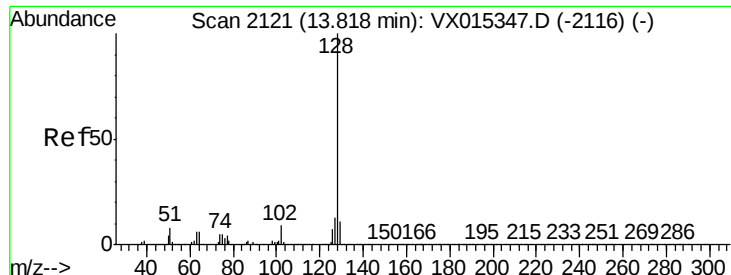
Delta R.T. -0.00 min

Lab File: VX015619.D

Acq: 10 Apr 2020 14:26

Tgt Ion:	146	Resp:	13068
Ion Ratio	Lower	Upper	
146	100		
111	44.4	20.4	61.2
148	58.7	31.9	95.9





#91
Naphthalene
Concen: 13.190 ug/l
RT: 13.82 min Scan# 2121
Delta R.T. -0.00 min
Lab File: VX015619.D
Acq: 10 Apr 2020 14:26

Instrument :
MSVOA_X
ClientSampleId :
400408744.2-VOA

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	13.3	10.3	15.5
129	11.2	8.9	13.3

Manual Integrations
APPROVED

apatel
4/13/2020 1:24:12 PM

