

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U072319\
 Data File : VU033371.D
 Acq On : 23 Jul 2019 10:33
 Operator : JC/SP
 Sample : K3591-08
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Manual Integrations
 APPROVED

Quant Time: Jul 24 03:47:10 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\524U072219DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Wed Jul 24 02:46:51 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	28253	1.00	ug/l	0.00

System Monitoring Compounds

57) 4-Bromofluorobenzene	10.30	95	10246	0.92	ug/l	0.00
Spiked Amount 1.000			Recovery	=	92.00%	
68) 1,2-Dichlorobenzene-d4	11.85	152	10455	0.91	ug/l	0.00
Spiked Amount 1.000			Recovery	=	91.00%	

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Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	1.20	85	6421	0.550	ug/l	96
3) Chloromethane	1.32	50	7524	0.583	ug/l	95
4) Vinyl Chloride	1.40	62	7780	0.541	ug/l	97
5) Bromomethane	1.62	94	5664	0.625	ug/l	96
6) Chloroethane	1.69	64	5066	0.501	ug/l	97
7) Trichlorofluoromethane	1.87	101	10223	0.517	ug/l	96
8) 1,1,2-Trichloro-1,2,2-trif	2.27	101	5519	0.541	ug/l	98
9) 1,1-Dichloroethene	2.27	96	5571	0.555	ug/l	96
10) Iodomethane	2.40	142	4828	0.358	ug/l	97
11) Allyl Chloride	2.58	41	8885	0.536	ug/l	94
12) Acrylonitrile	2.92	53	2899	1.034	ug/l #	89
13) Acetone	2.31	43	6678	2.793	ug/l	92
14) Carbon Disulfide	2.46	76	20358	0.534	ug/l	96
15) Methylene Chloride	2.68	84	8098	0.598	ug/l	97
16) trans-1,2-Dichloroethene	2.96	96	6678	0.560	ug/l	98
17) 1,1-Dichloroethane	3.42	63	8549	0.534	ug/l	98
18) 2-Butanone	4.27	43	5004	2.193	ug/l	91
19) Cyclohexane	4.96	56	5868m	0.500	ug/l	
20) Methylcyclohexane	6.40	83	5815	0.492	ug/l	97
21) 2,2-Dichloropropane	4.21	77	8195	0.604	ug/l #	84
22) cis-1,2-Dichloroethene	4.20	96	4739	0.525	ug/l	92
23) Diethyl Ether	2.09	59	4292	0.496	ug/l	94
24) tert-Butyl Alcohol	2.82	59	6567	4.939	ug/l #	89
25) Methyl tert-Butyl Ether	2.98	73	14512	0.502	ug/l	97
26) Bromochloromethane	4.52	128	2005	0.505	ug/l	93
27) Chloroform	4.65	83	11302	0.618	ug/l	92
28) 1,1,1-Trichloroethane	4.89	97	7784	0.550	ug/l	97
29) 1,1-Dichloropropene	5.11	75	6179	0.529	ug/l	95
30) Carbon Tetrachloride	5.11	117	6499	0.522	ug/l	92
31) Isopropyl Ether	3.55	45	10513	0.520	ug/l	99
32) Ethyl-t-butyl ether	4.04	59	9911	0.510	ug/l	97
33) Tert-Amyl methyl ether	5.56	73	8098	0.463	ug/l	96
34) Propionitrile	4.35	54	1228	1.876	ug/l #	61
35) Benzene	5.37	78	17268	0.512	ug/l	96
36) 1,2-Dichloroethane	5.39	62	5740	0.511	ug/l	96
37) Trichloroethene	6.16	130	4838	0.543	ug/l	93
38) 1,2-Dichloropropane	6.41	63	4500	0.483	ug/l #	83
39) Methacrylonitrile	4.55	41	1181m	0.454	ug/l	
40) Methyl acrylate	4.42	55	1621	0.401	ug/l #	73
41) Tetrahydrofuran	4.63	42	1310	1.005	ug/l #	33
42) 1-Chlorobutane	5.04	56	7149	0.457	ug/l	84

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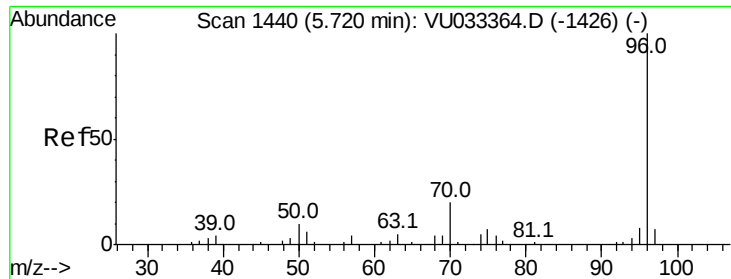
Manual Integrations
 APPROVED

Quant Time: Jul 24 03:47:10 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\524U072219DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

43) Dibromomethane	6.54	93	2399	0.466	ug/l	92
44) Bromodichloromethane	6.74	83	6445	0.519	ug/l	100
45) 4-Methyl-2-Pentanone	7.45	43	12152	2.312	ug/l #	90
46) t-1,4-Dichloro-2-butene	10.50	75	2182m	1.029	ug/l	
47) Methyl methacrylate	6.62	69	2873	0.731	ug/l #	83
48) Ethyl methacrylate	8.01	69	3131	0.452	ug/l	89
49) Toluene	7.62	92	9122	0.472	ug/l	93
50) t-1,3-Dichloropropene	7.87	75	4596	0.443	ug/l	96
51) cis-1,3-Dichloropropene	7.25	75	5843	0.478	ug/l	95
52) 1,1,2-Trichloroethane	8.05	97	3453	0.501	ug/l	91
53) 1,3-Dichloropropane	8.23	76	5522	0.474	ug/l	98
54) 2-Hexanone	8.36	43	7337	1.983	ug/l	90
55) Dibromochloromethane	8.46	129	3982	0.495	ug/l	94
56) 1,2-Dibromoethane	8.58	107	2871	0.447	ug/l	96
58) Tetrachloroethene	8.21	164	3629	0.449	ug/l #	88
59) Chlorobenzene	9.10	112	10736	0.485	ug/l	96
60) 1,1,1,2-Tetrachloroethane	9.19	131	3901	0.464	ug/l	90
61) Pentachloroethane	11.09	117	3735	0.541	ug/l	90
62) Hexachloroethane	12.13	117	3342	0.500	ug/l	98
63) Ethyl Benzene	9.23	91	15395	0.433	ug/l	98
64) m/p-Xylenes	9.36	106	11762	0.827	ug/l	93
65) o-Xylene	9.76	106	5381	0.395	ug/l	90
66) Styrene	9.78	104	8687	0.376	ug/l	97
67) Bromoform	9.94	173	2033	0.467	ug/l #	67
69) Isopropylbenzene	10.15	105	14289	0.409	ug/l	97
70) 1,1,2,2-Tetrachloroethane	10.44	83	4204	0.461	ug/l #	94
71) 1,2,3-Trichloropropane	10.48	75	3269m	0.464	ug/l	
72) Bromobenzene	10.44	156	4149	0.449	ug/l	88
73) n-propylbenzene	10.57	120	4090	0.411	ug/l	100
74) 2-Chlorotoluene	10.64	126	4284	0.471	ug/l	85
75) 1,3,5-Trimethylbenzene	10.76	105	12235	0.390	ug/l	97
76) 4-Chlorotoluene	10.76	126	3829	0.404	ug/l	98
77) tert-Butylbenzene	11.09	119	13260	0.446	ug/l	97
78) 1,2,4-Trimethylbenzene	11.13	105	11953	0.373	ug/l	97
79) sec-Butylbenzene	11.31	105	16530	0.404	ug/l	99
81) p-Isopropyltoluene	11.46	119	12764	0.384	ug/l	97
82) 1,3-Dichlorobenzene	11.40	146	8807	0.449	ug/l	96
83) 1,4-Dichlorobenzene	11.49	146	8702	0.448	ug/l	96
84) n-Butylbenzene	11.87	91	13365	0.392	ug/l	96
85) 1,2-Dichlorobenzene	11.86	146	8816	0.479	ug/l	93
86) 1,2-Dibromo-3-Chloropropan	12.65	75	695	0.484	ug/l #	78
87) 1,2,4-Trichlorobenzene	13.49	180	4773	0.436	ug/l	89
88) Hexachlorobutadiene	13.68	225	3392	0.502	ug/l	94
89) Naphthalene	13.74	128	6411	0.336	ug/l	95
90) 1,2,3-Trichlorobenzene	13.98	180	4408	0.415	ug/l	90

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



#1

Fluorobenzene

Concen: 1.000 ug/l

RT: 5.72 min Scan# 1441

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

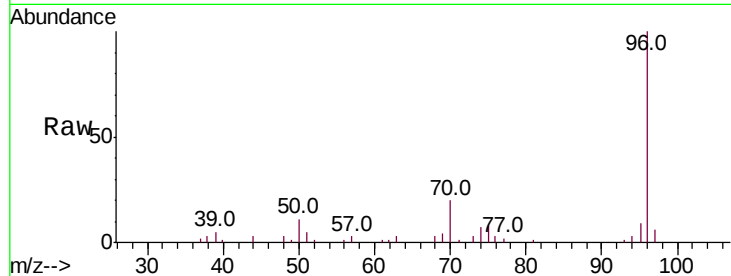
ClientSampleId :

LOQ-WATER-02-QT3-2019

Tot Ion: 96 Resp: 28253

Ion	Ratio	Lower	Upper
96	100		
70	19.9	16.4	24.6
95	9.4	6.7	10.1
97	6.5	0.0	0.0#

Manual Integrations
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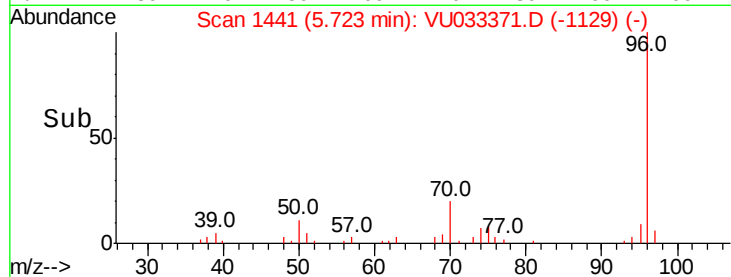
Abundance Ion 96.00 (95.70 to 96.70): VU033364.D (-1426) (-)

Ion 70.00 (69.70 to 70.70): VU033364.D (-1426) (-)

Ion 95.00 (94.70 to 95.70): VU033364.D (-1426) (-)

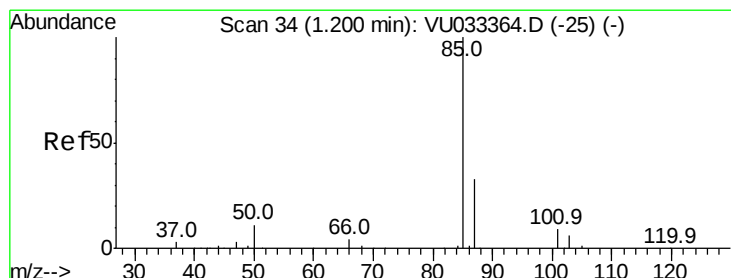
Ion 97.00 (96.70 to 97.70): VU033364.D (-1426) (-)

Time-->



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#2

Dichlorodifluoromethane

Concen: 0.550 ug/l

RT: 1.20 min Scan# 34

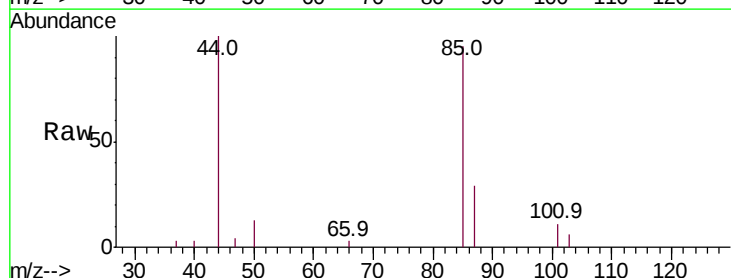
Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tgt Ion: 85 Resp: 6421

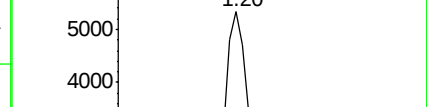
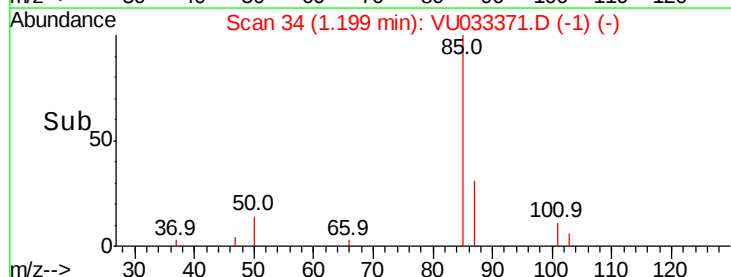
Ion	Ratio	Lower	Upper
85	100		
87	30.6	16.6	49.7

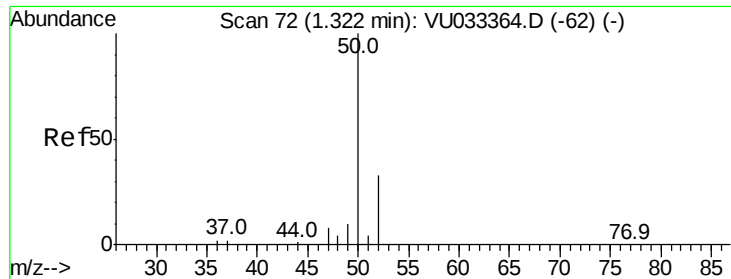


Abundance Ion 85.00 (84.70 to 85.70): VU033364.D (-25) (-)

Ion 87.00 (86.70 to 87.70): VU033364.D (-25) (-)

Time-->





#3

Chloromethane

Concen: 0.583 ug/l

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

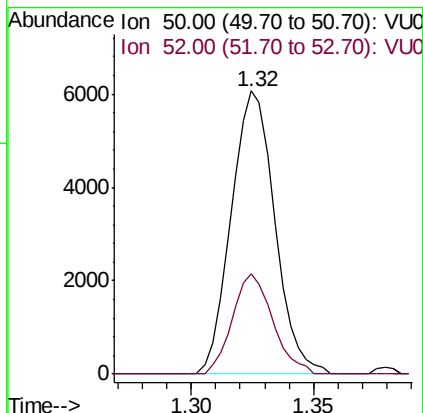
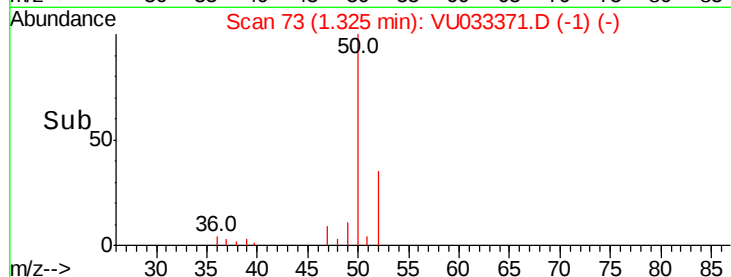
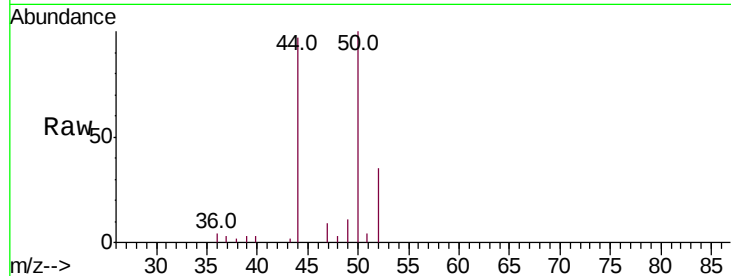
Tot Ion: 50 Resp: 7524

Ion Ratio Lower Upper

50 100

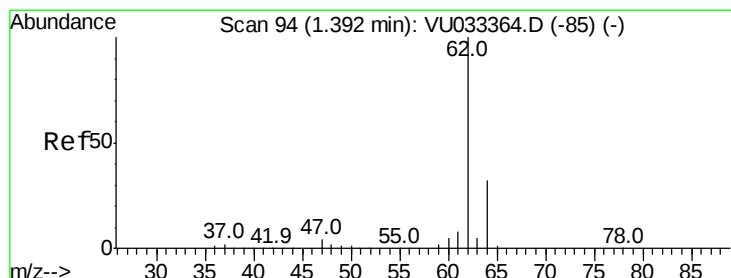
52 35.3 26.1 39.1

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#4

Vinyl Chloride

Concen: 0.541 ug/l

RT: 1.40 min Scan# 95

Delta R.T. 0.00 min

Lab File: VU033371.D

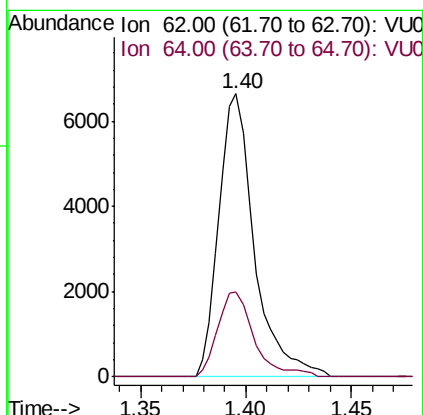
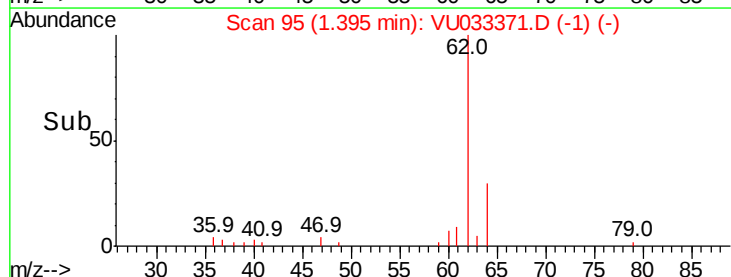
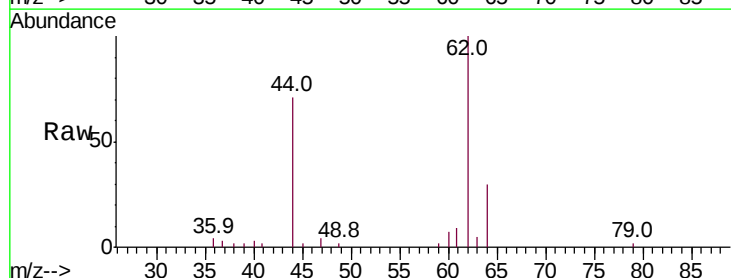
Acq: 23 Jul 2019 10:33

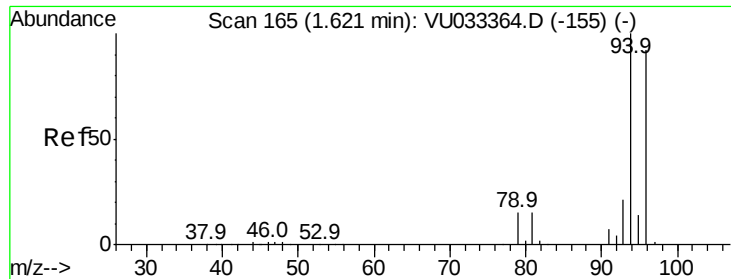
Tgt Ion: 62 Resp: 7780

Ion Ratio Lower Upper

62 100

64 30.2 25.6 38.4





#5

Bromomethane

Concen: 0.625 ug/l

RT: 1.62 min Scan# 165

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

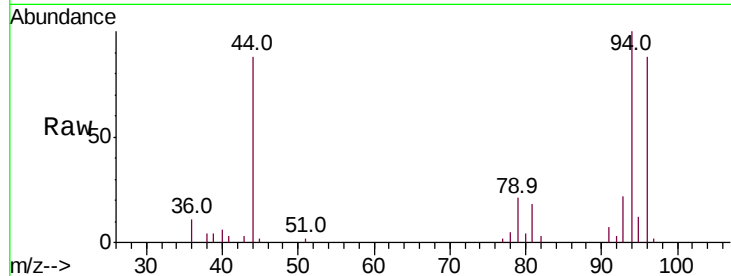
Tot Ion: 94 Resp: 5664

Ion Ratio Lower Upper

94 100

96 87.8 73.2 109.8

Manual Integrations
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Abundance Ion 94.00 (93.70 to 94.70): VU033364.D (-155) (-)

Ion 96.00 (95.70 to 96.70): VU033364.D (-155) (-)

1.62

5000

4000

3000

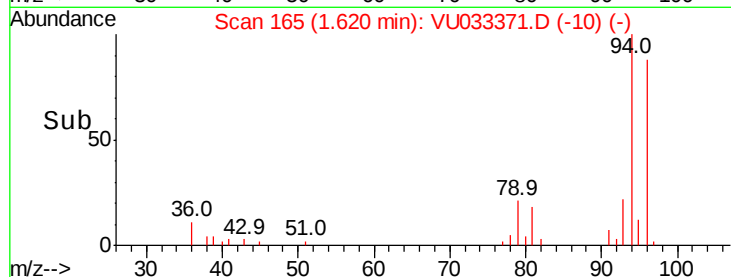
2000

1000

0

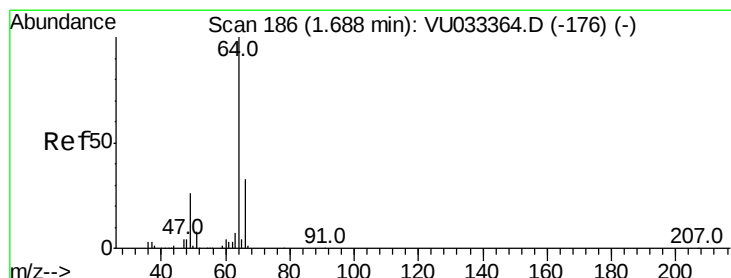
Time-->

1.55 1.60 1.65 1.70



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#6

Chloroethane

Concen: 0.501 ug/l

RT: 1.69 min Scan# 186

Delta R.T. -0.00 min

Lab File: VU033371.D

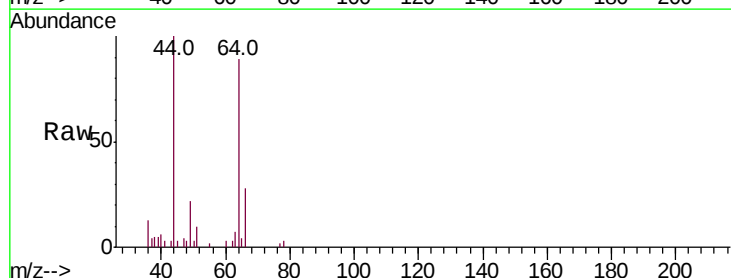
Acq: 23 Jul 2019 10:33

Tgt Ion: 64 Resp: 5066

Ion Ratio Lower Upper

64 100

66 31.1 26.4 39.6



Abundance Ion 64.00 (63.70 to 64.70): VU033364.D (-176) (-)

Ion 66.00 (65.70 to 66.70): VU033364.D (-176) (-)

1.69

4000

3000

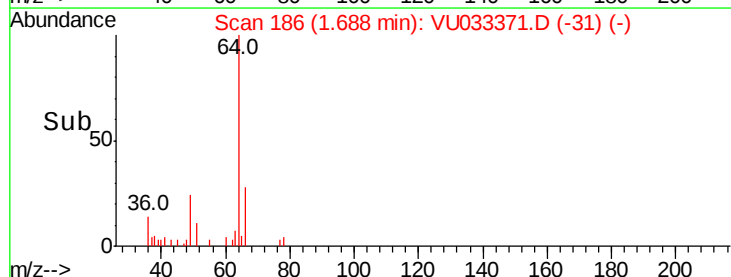
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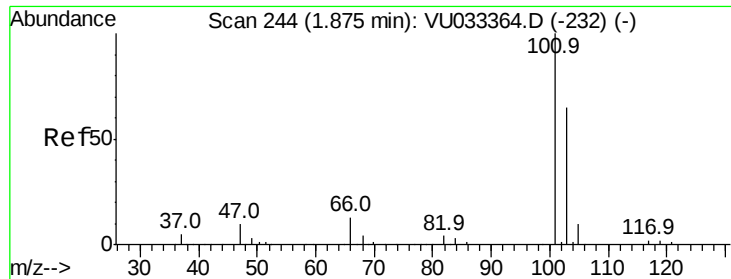
1000

0

Time-->

1.65 1.70





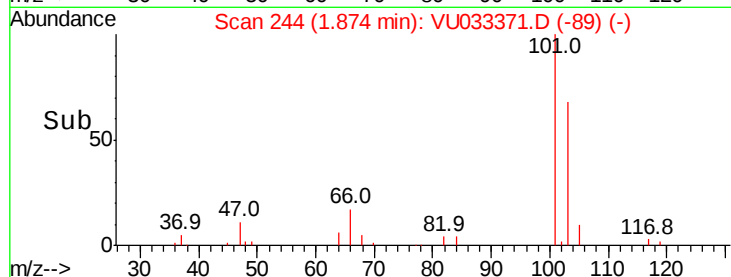
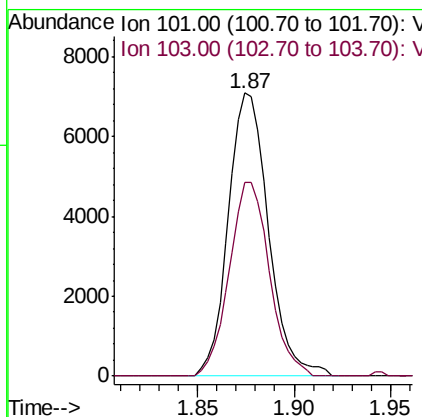
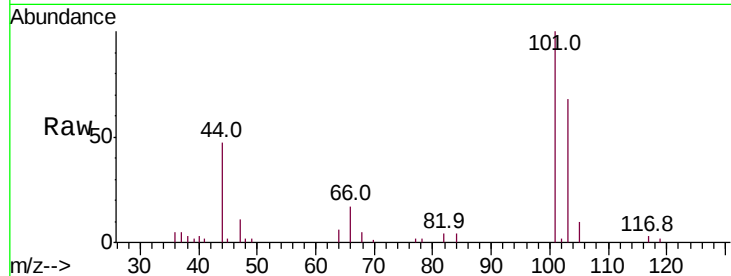
#7

Trichlorofluoromethane
Concen: 0.517 ug/l
RT: 1.87 min Scan# 244
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

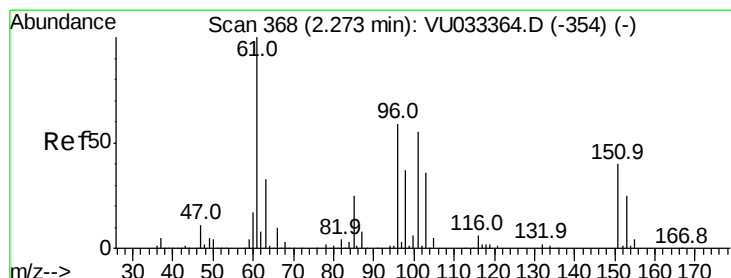
Tot Ion	Ratio	Lower	Upper
101	100		
103	68.3	52.2	78.2

Manual Integrations
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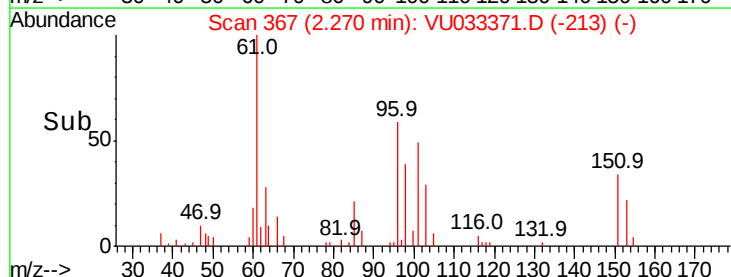
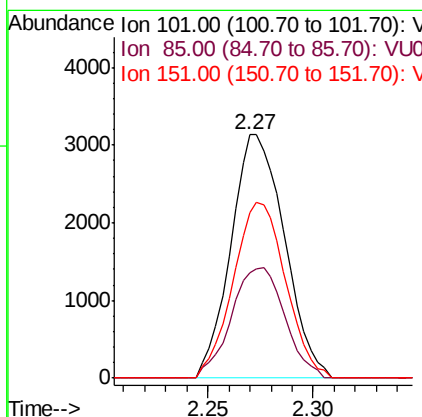
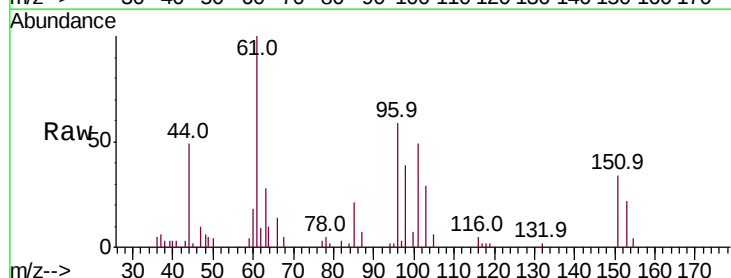
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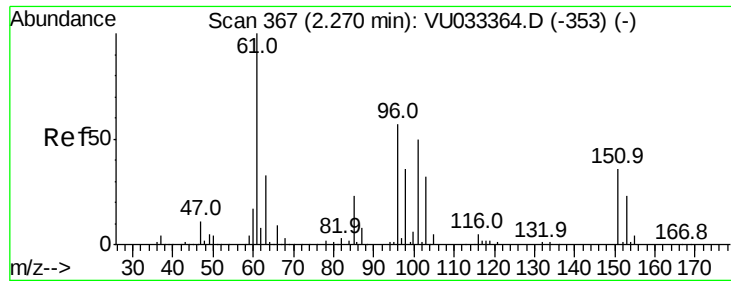


#8

1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.541 ug/l
RT: 2.27 min Scan# 367
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
101	100		
85	45.2	37.5	56.3
151	70.8	58.3	87.5





#9

1,1-Dichloroethene

Concen: 0.555 ug/l

RT: 2.27 min Scan# 367

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

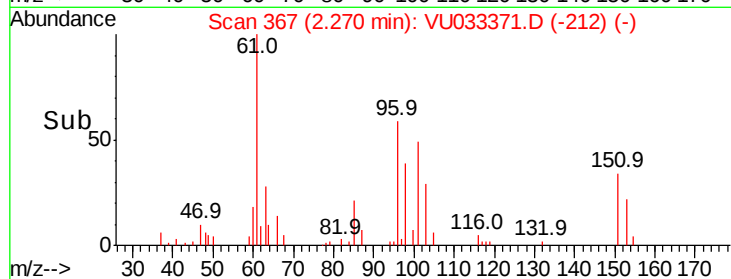
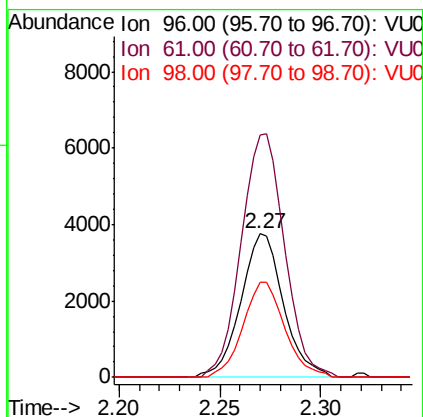
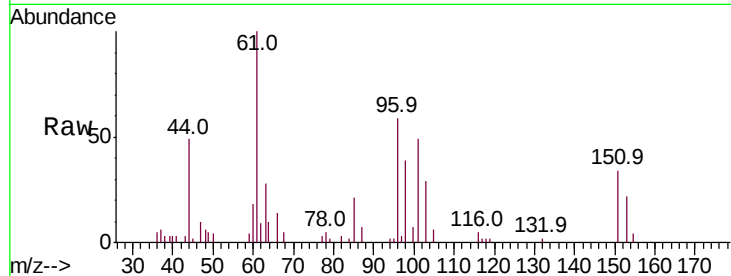
MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

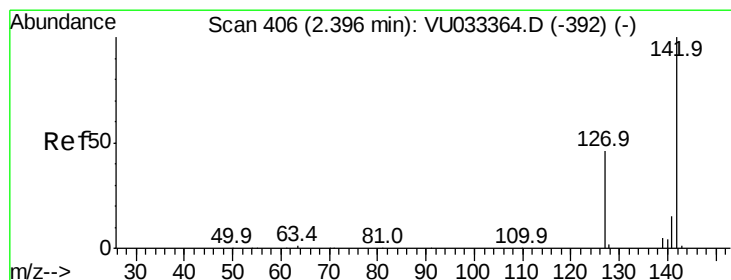
Tot Ion:	96	Resp:	5571
Ion	Ratio	Lower	Upper
96	100		
61	169.5	0.0	525.6
98	66.2	0.0	126.4

Manual Integrations
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#10

Iodomethane

Concen: 0.358 ug/l

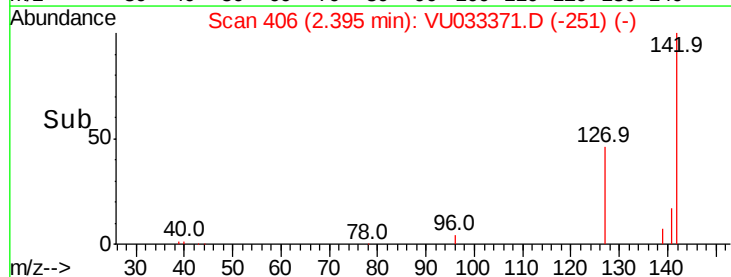
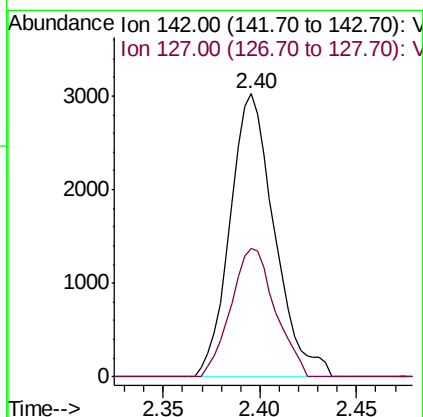
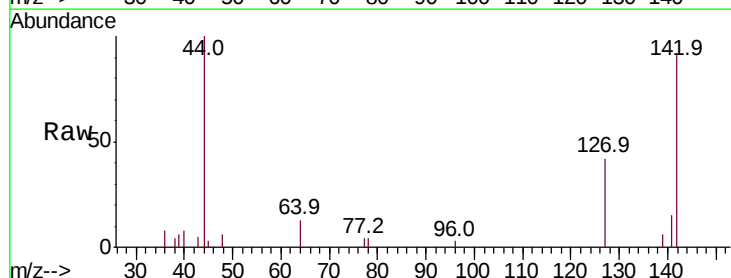
RT: 2.40 min Scan# 406

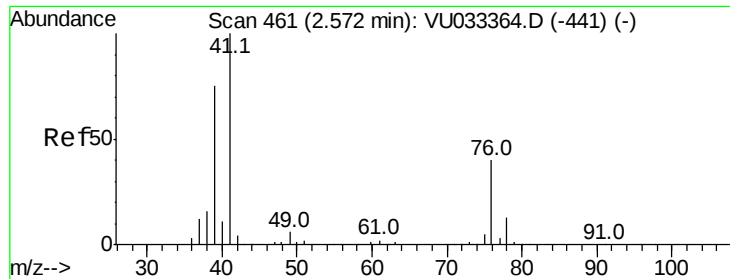
Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tgt Ion:	142	Resp:	4828
Ion	Ratio	Lower	Upper
142	100		
127	45.1	37.8	56.6



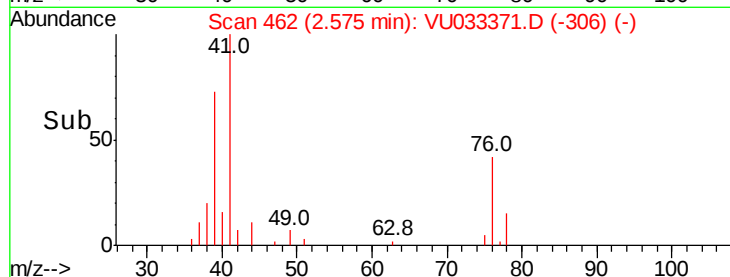
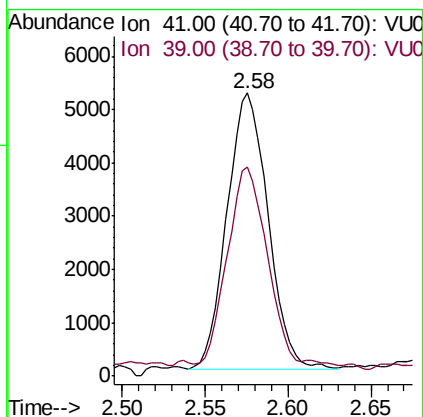
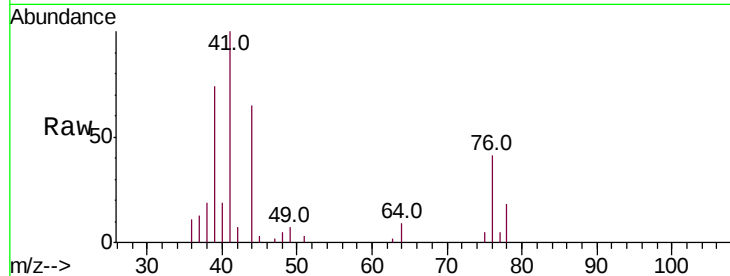


#11
Allvl Chloride
Concen: 0.536 ug/l
RT: 2.58 min Scan# 462
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

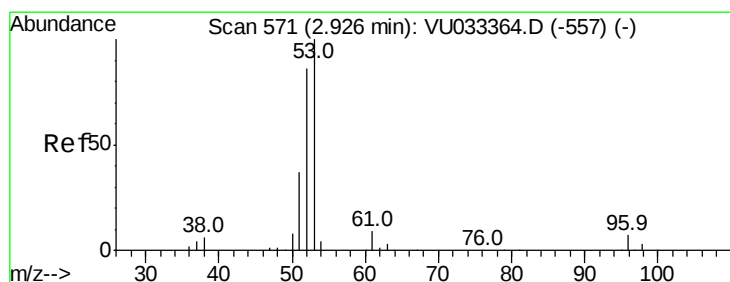
Tot Ion: 41 Resp: 8885
Ion Ratio Lower Upper
41 100
39 68.5 58.7 88.1

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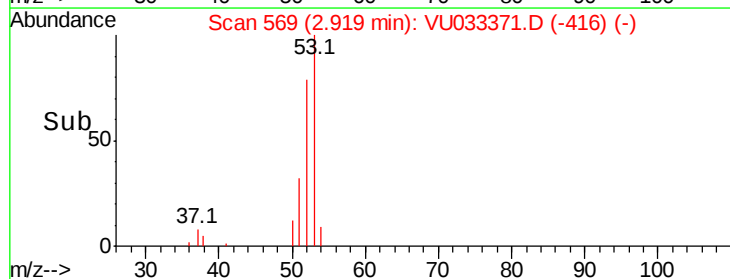
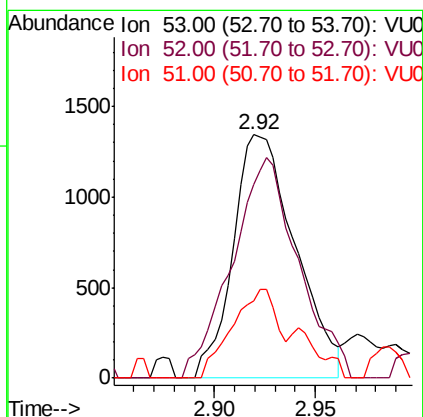
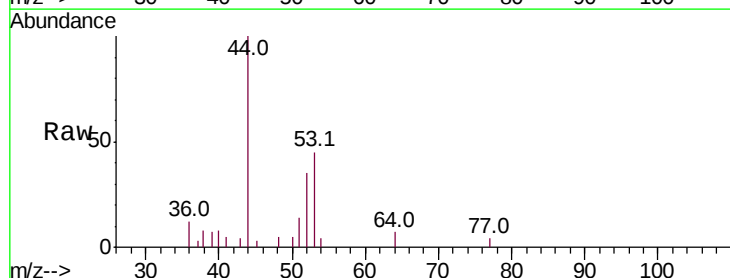
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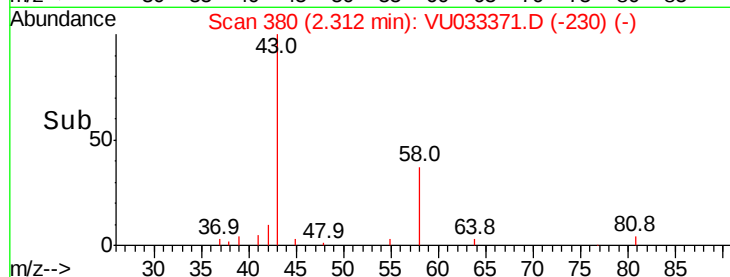
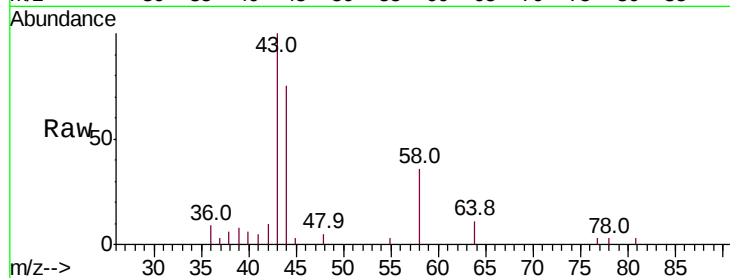
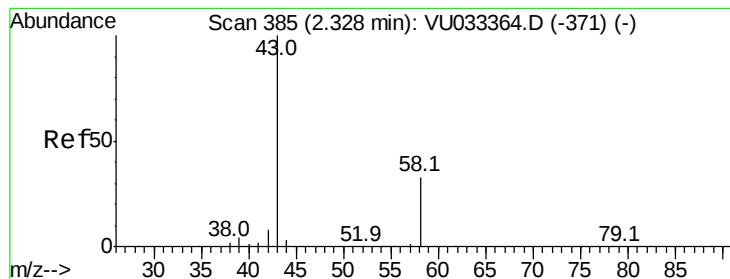
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#12
Acrylonitrile
Concen: 1.034 ug/l
RT: 2.92 min Scan# 569
Delta R.T. -0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion: 53 Resp: 2899
Ion Ratio Lower Upper
53 100
52 96.2 69.8 104.8
51 26.9 29.1 43.7#





#13

Acetone

Concen: 2.793 ug/l

RT: 2.31 min Scan# 380

Delta R.T. -0.02 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tot Ion: 43 Resp: 6678

Ion Ratio Lower Upper

43 100

58 37.3 26.3 39.5

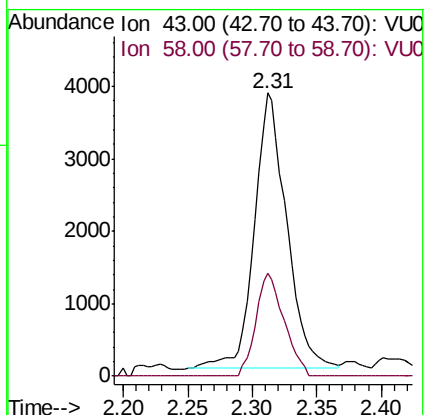
Instrument :

MSVOA_U

ClientSampleId :

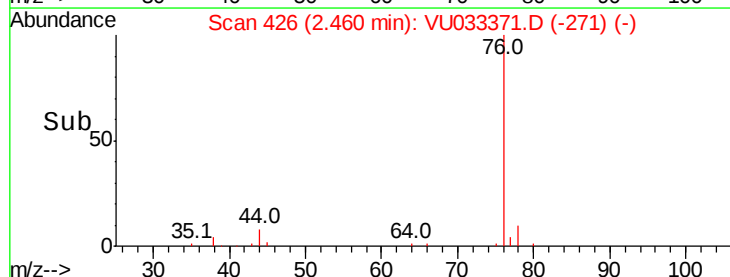
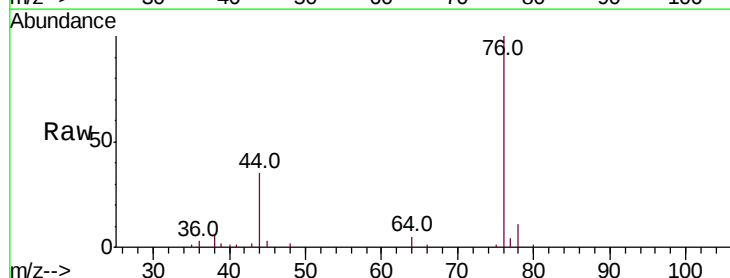
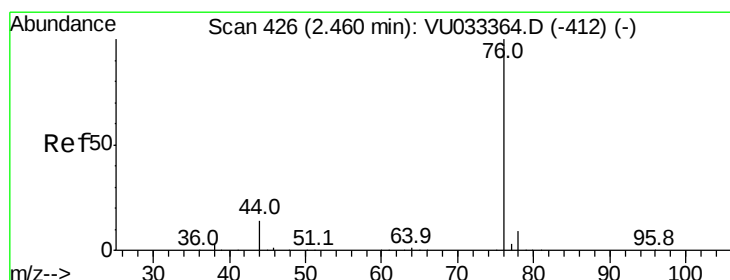
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#14

Carbon Disulfide

Concen: 0.534 ug/l

RT: 2.46 min Scan# 426

Delta R.T. -0.00 min

Lab File: VU033371.D

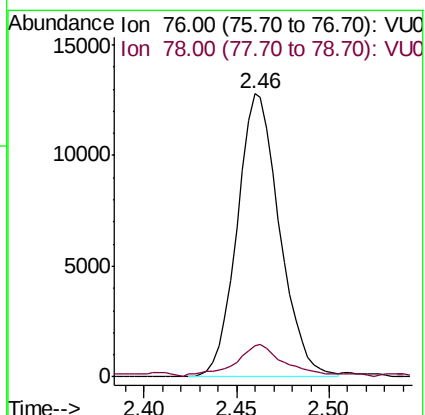
Acq: 23 Jul 2019 10:33

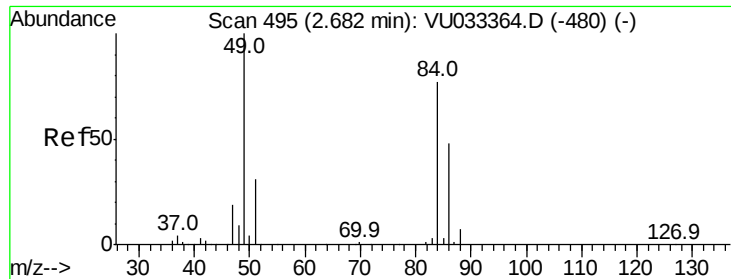
Tgt Ion: 76 Resp: 20358

Ion Ratio Lower Upper

76 100

78 10.3 7.1 10.7



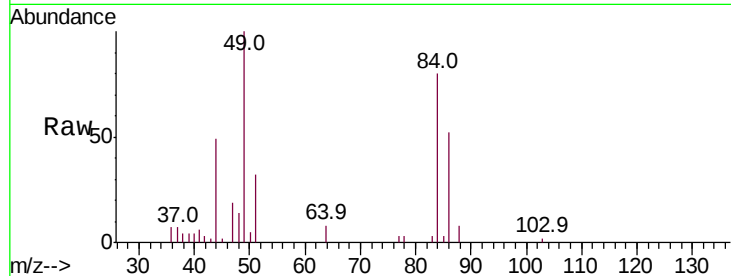


#15
Methvlene Chloride
Concen: 0.598 ug/l
RT: 2.68 min Scan# 495
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

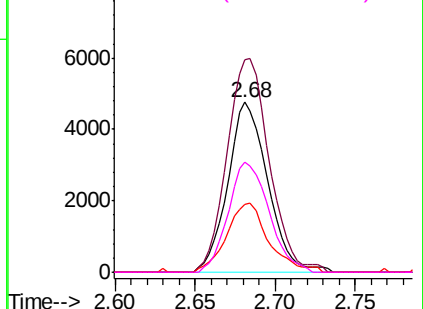
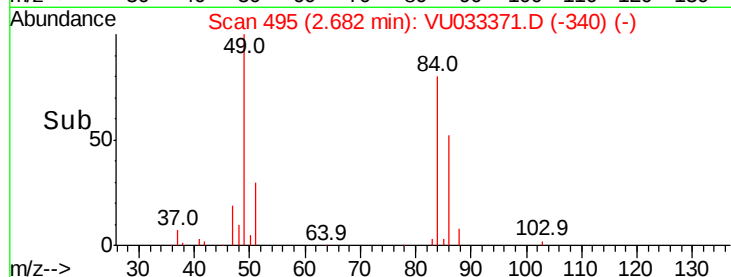
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion:	84	Resp:	8098
Ion	Ratio	Lower	Upper
84	100		
49	124.9	103.5	155.3
51	40.1	0.0	80.4
86	64.7	50.1	75.1

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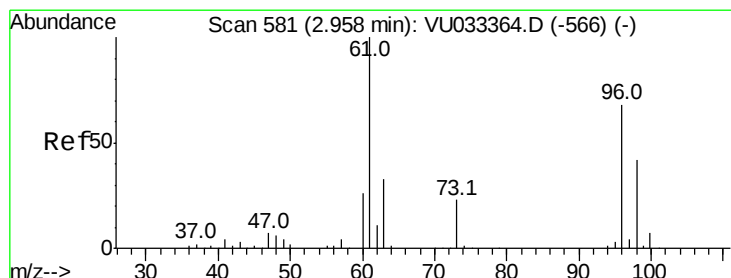


Abundance Ion 84.00 (83.70 to 84.70): VU0
Ion 49.00 (48.70 to 49.70): VU0
Ion 51.00 (50.70 to 51.70): VU0
Ion 86.00 (85.70 to 86.70): VU0



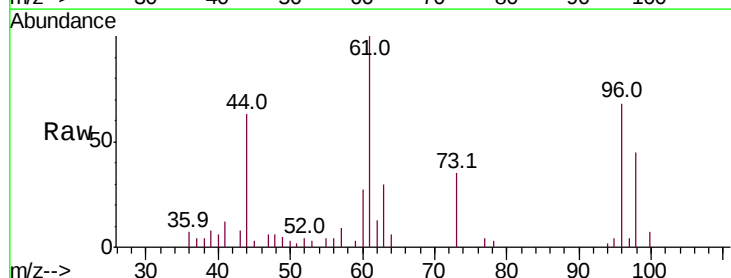
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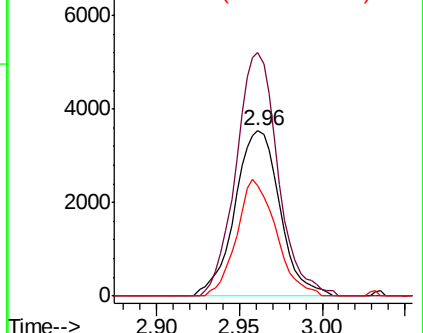
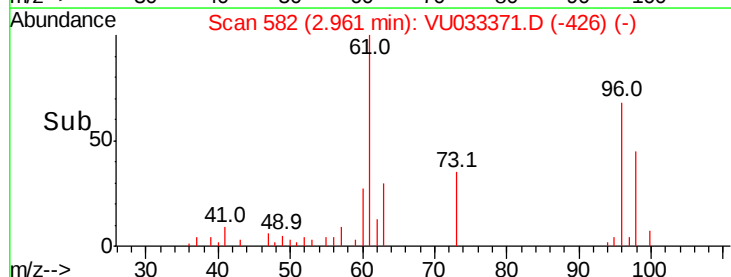


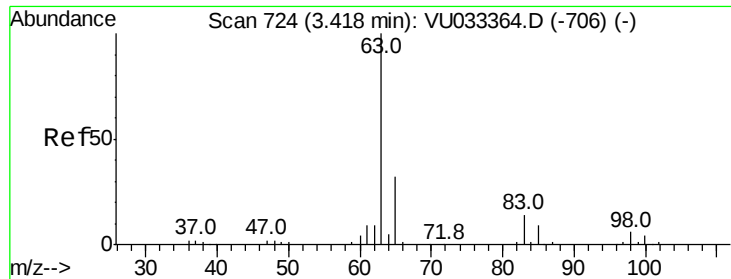
#16
trans-1,2-Dichloroethene
Concen: 0.560 ug/l
RT: 2.96 min Scan# 582
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion:	96	Resp:	6678
Ion	Ratio	Lower	Upper
96	100		
61	147.5	118.0	177.0
98	66.6	49.4	74.2



Abundance Ion 96.00 (95.70 to 96.70): VU0
Ion 61.00 (60.70 to 61.70): VU0
Ion 98.00 (97.70 to 98.70): VU0



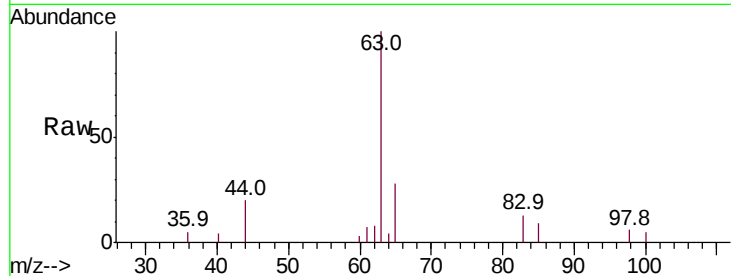


#17
 1,1-Dichloroethane
 Concen: 0.534 ug/l
 RT: 3.42 min Scan# 725
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

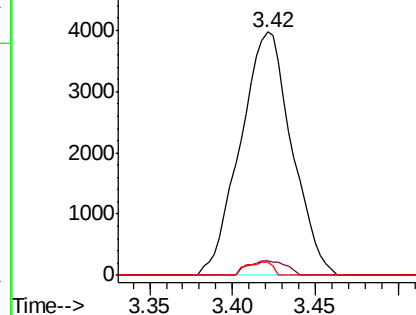
Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Tot Ion:	63	Resp:	8549
Ion	Ratio	Lower	Upper
63	100		
98	6.0	3.2	9.6
100	5.3	2.1	6.2

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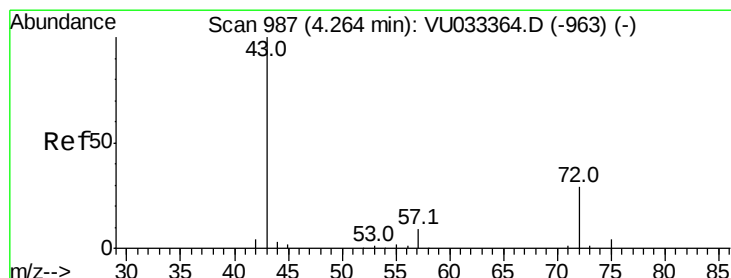
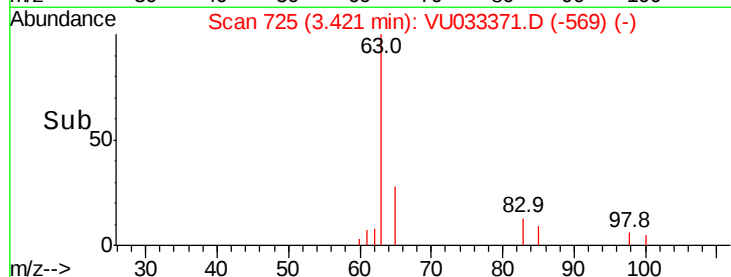


Abundance Ion 63.00 (62.70 to 63.70): VU033364.D (-706) (-)
 Ion 98.00 (97.70 to 98.70): VU033364.D (-706) (-)
 Ion 100.00 (99.70 to 100.70): VU033364.D (-706) (-)



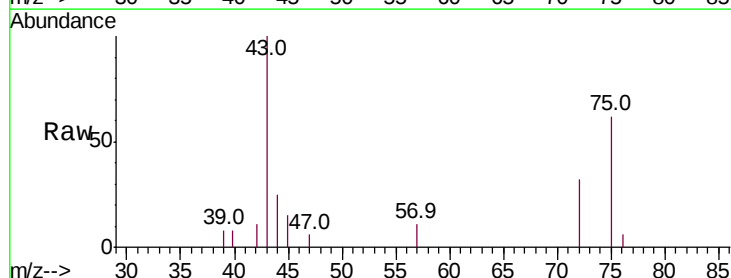
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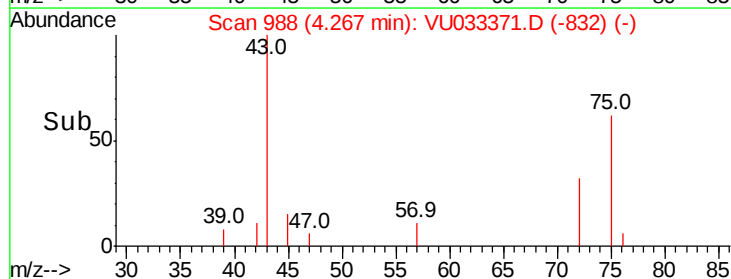
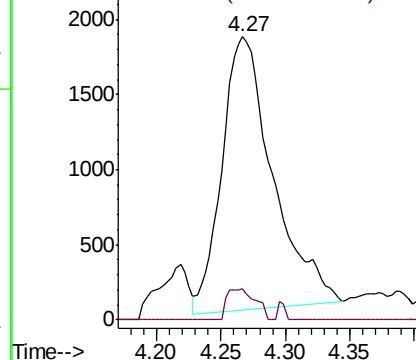


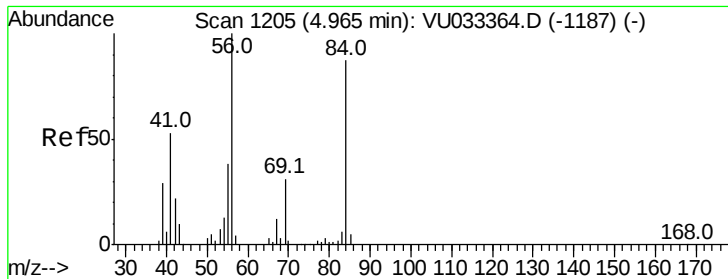
#18
 2-Butanone
 Concen: 2.193 ug/l
 RT: 4.27 min Scan# 988
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion:	43	Resp:	5004
Ion	Ratio	Lower	Upper
43	100		
57	11.8	0.0	17.0



Abundance Ion 43.00 (42.70 to 43.70): VU033364.D (-963) (-)
 Ion 57.00 (56.70 to 57.70): VU033364.D (-963) (-)



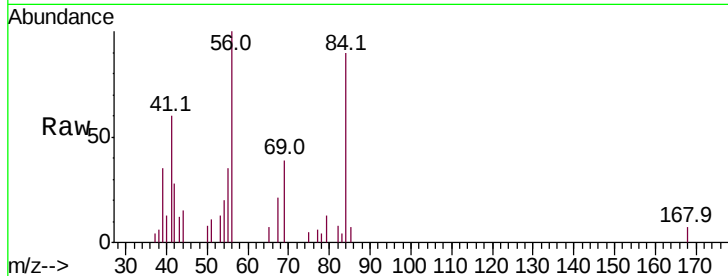


#19
Cyclohexane
Concen: 0.500 ug/l m
RT: 4.96 min Scan# 1205
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

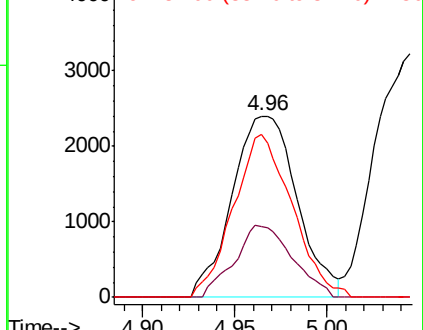
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	56	Ratio	Lower	Upper
56	100			
69	35.4	25.0	37.4	
84	81.3	69.8	104.6	

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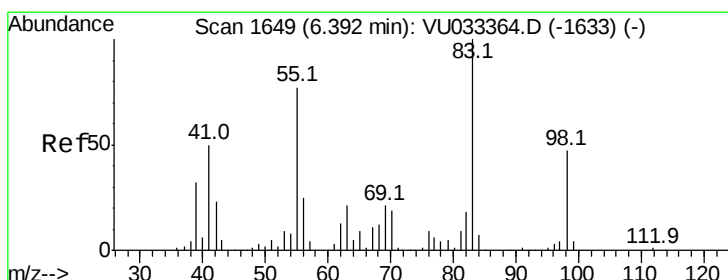
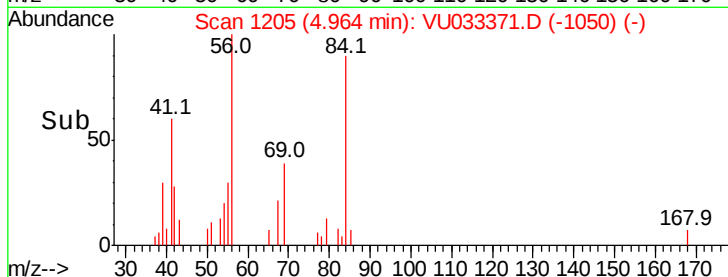


Abundance Ion 56.00 (55.70 to 56.70): VU033371.D (-1050) (-)
Ion 69.00 (68.70 to 69.70): VU033371.D (-1050) (-)
Ion 84.00 (83.70 to 84.70): VU033371.D (-1050) (-)



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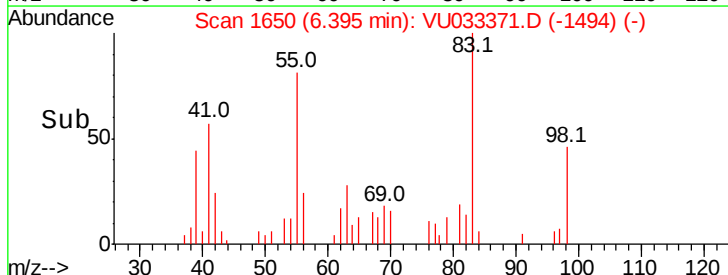
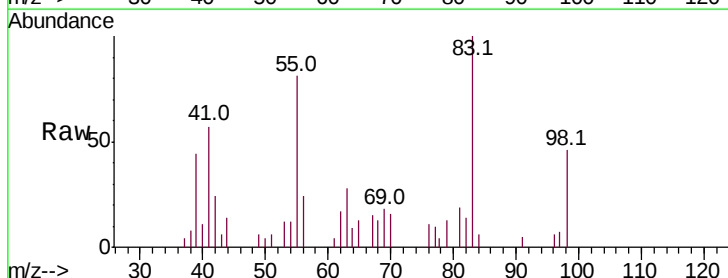
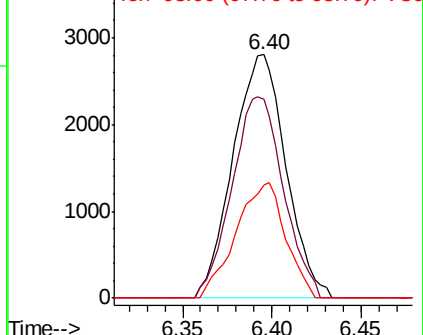
7/25/2019 11:15:32 AM

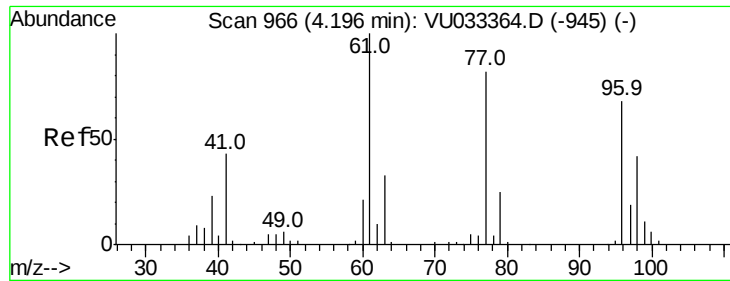


#20
Methylcyclohexane
Concen: 0.492 ug/l
RT: 6.40 min Scan# 1650
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	83	Ratio	Lower	Upper
83	100			
55	80.1	62.3	93.5	
98	44.2	37.4	56.0	

Abundance Ion 83.00 (82.70 to 83.70): VU033371.D (-1494) (-)
Ion 55.00 (54.70 to 55.70): VU033371.D (-1494) (-)
Ion 98.00 (97.70 to 98.70): VU033371.D (-1494) (-)



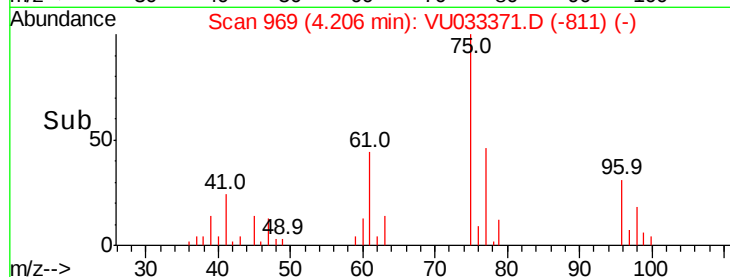
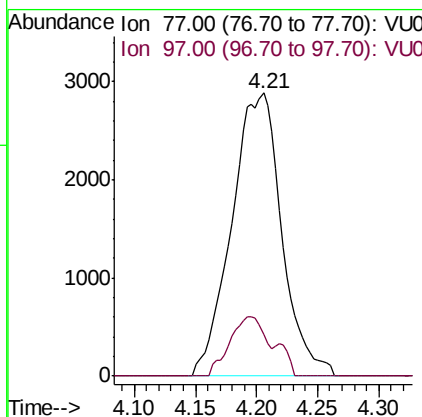
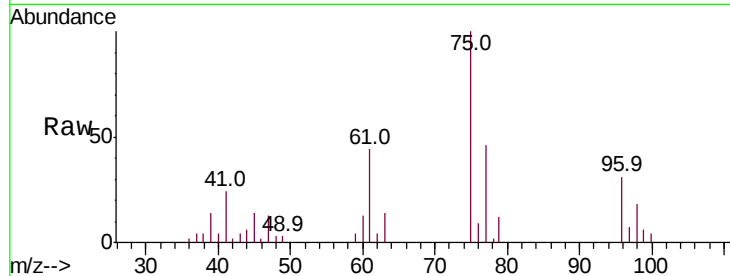


#21
2,2-Dichloropropane
Concen: 0.604 ug/l
RT: 4.21 min Scan# 969
Delta R.T. 0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

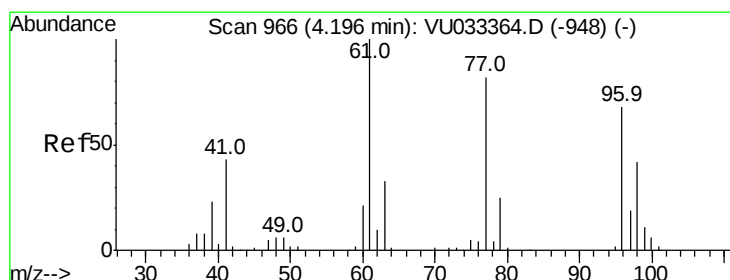
Tot Ion: 77 Resp: 8195
Ion Ratio Lower Upper
77 100
97 14.8 17.8 26.8#

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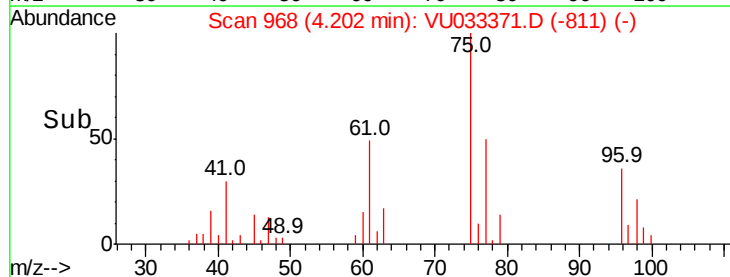
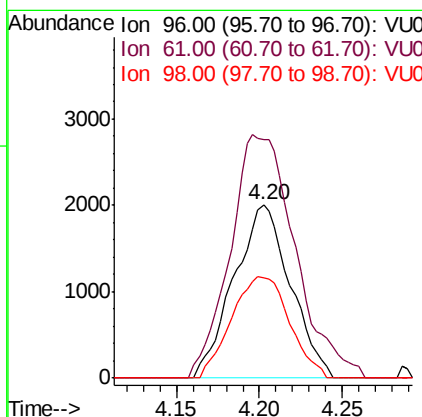
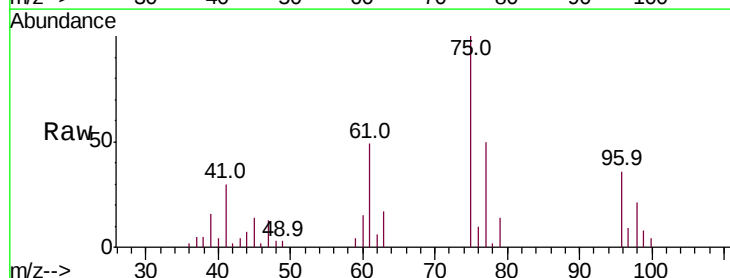
MMDadoda

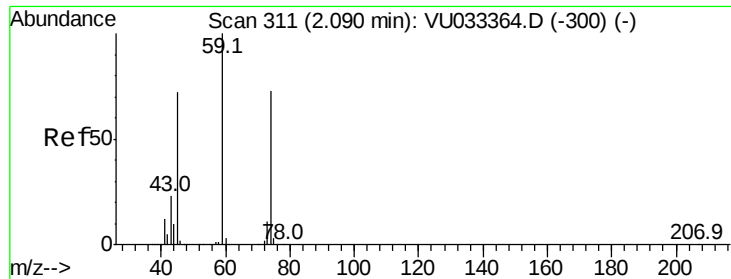
7/25/2019 11:15:32 AM



#22
cis-1,2-Dichloroethene
Concen: 0.525 ug/l
RT: 4.20 min Scan# 968
Delta R.T. 0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion: 96 Resp: 4739
Ion Ratio Lower Upper
96 100
61 162.1 0.0 376.3
98 60.1 31.9 95.9



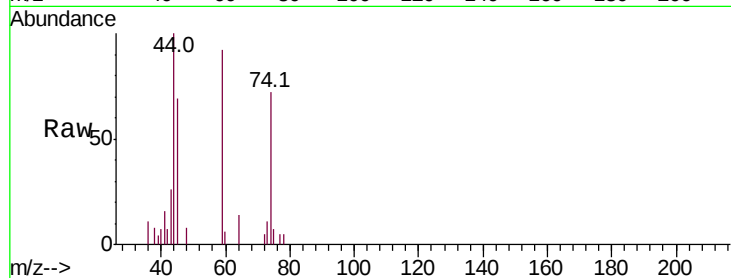


#23
Diethyl Ether
Concen: 0.496 ug/l
RT: 2.09 min Scan# 312
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

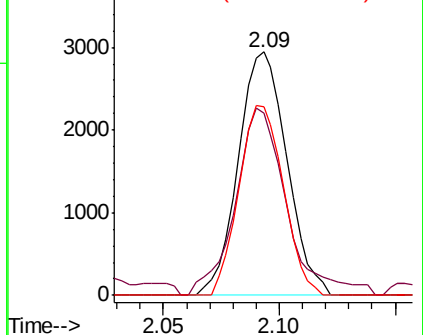
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
59	100		
45	81.4	57.6	86.4
74	71.3	57.8	86.6

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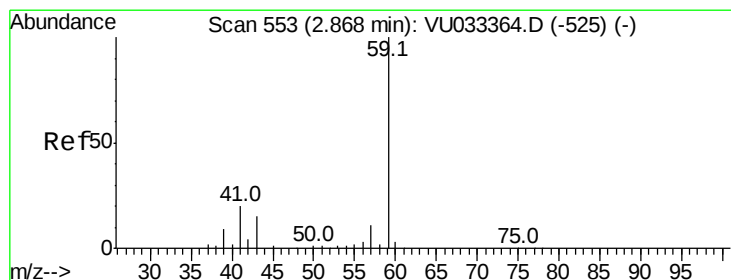
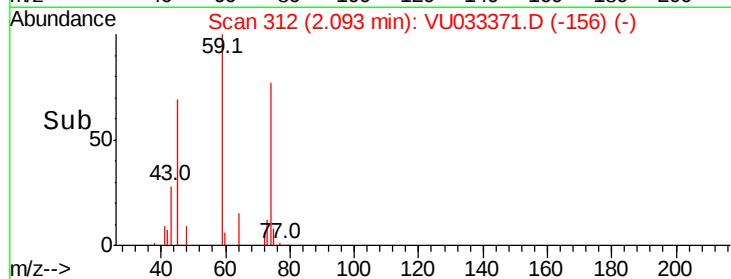


Abundance Ion 59.00 (58.70 to 59.70): VU0
Ion 45.00 (44.70 to 45.70): VU0
Ion 74.00 (73.70 to 74.70): VU0



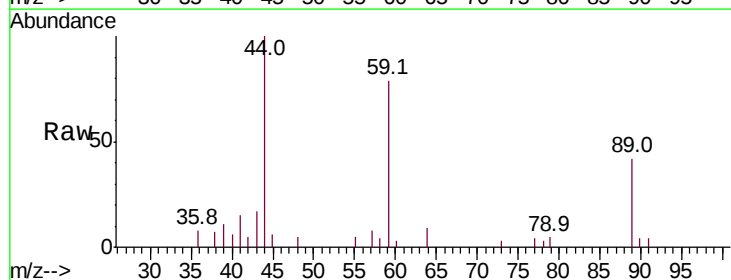
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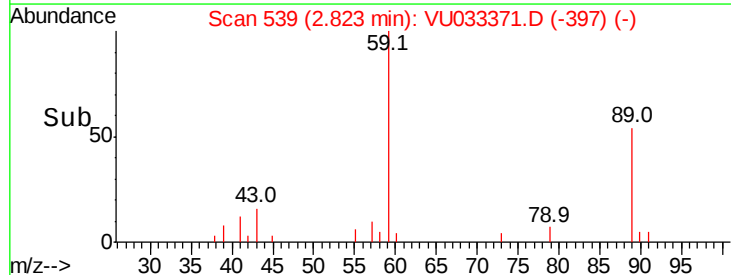
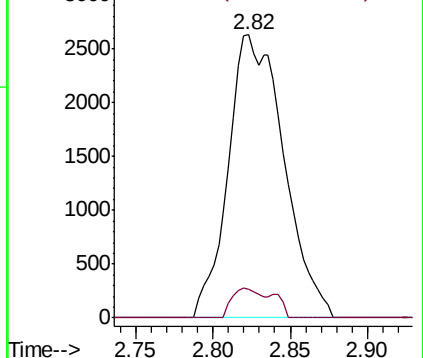


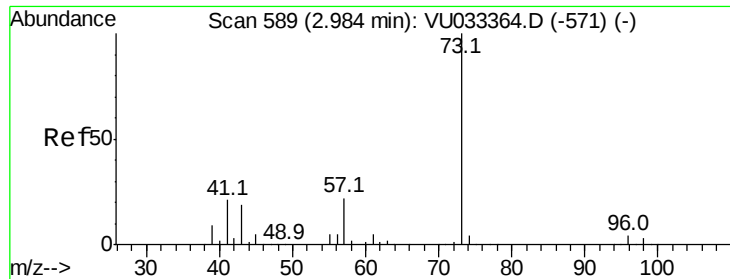
#24
tert-Butyl Alcohol
Concen: 4.939 ug/l
RT: 2.82 min Scan# 539
Delta R.T. -0.05 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
59	100		
57	5.8	7.8	11.8#



Abundance Ion 59.00 (58.70 to 59.70): VU0
Ion 57.00 (56.70 to 57.70): VU0



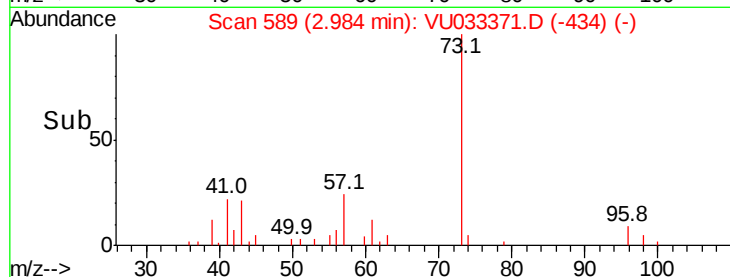
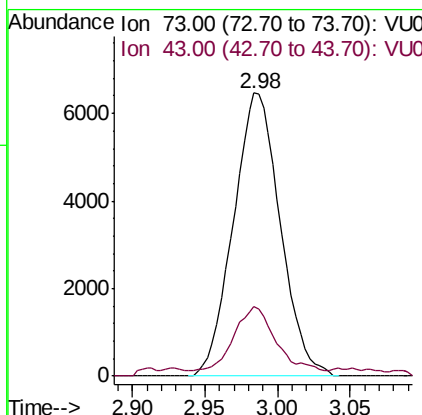
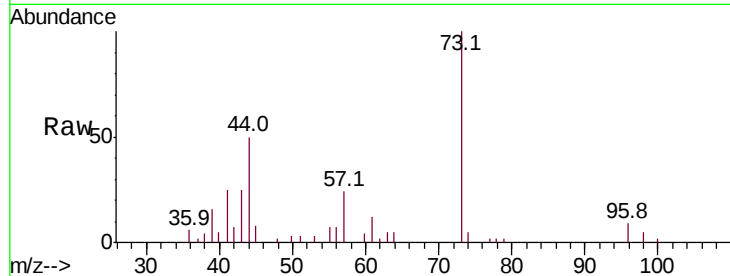


#25
Methvl tert-Butvl Ether
Concen: 0.502 ug/l
RT: 2.98 min Scan# 589
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

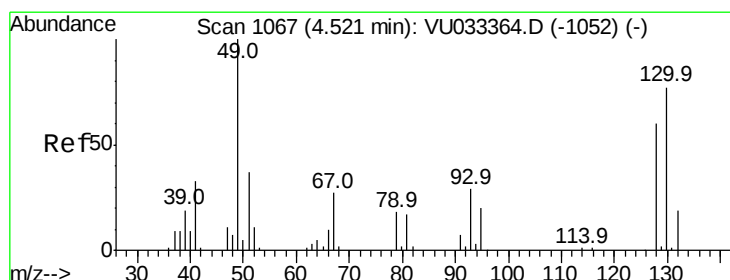
Tot Ion: 73 Resp: 14512
Ion Ratio Lower Upper
73 100
43 19.5 16.6 24.8

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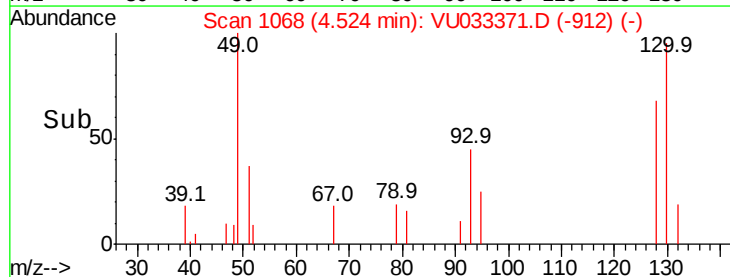
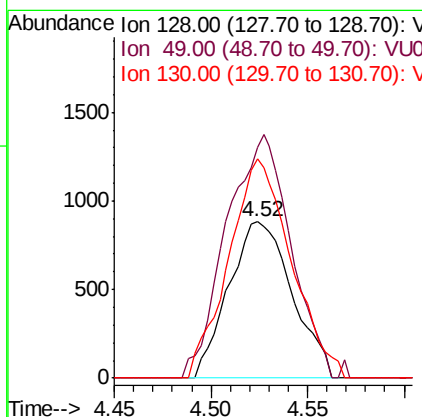
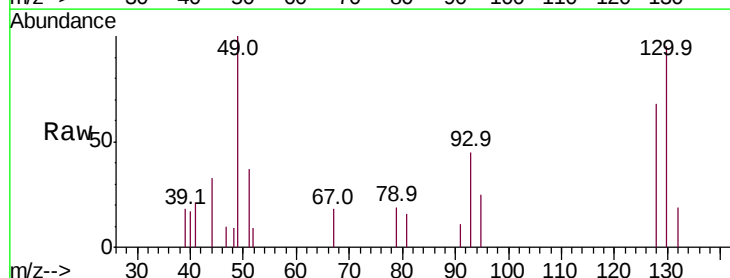
MMDadoda

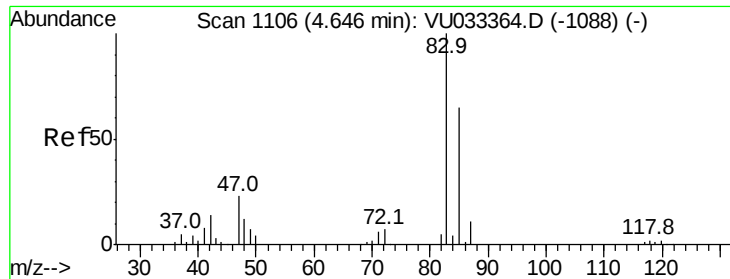
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#26
Bromochloromethane
Concen: 0.505 ug/l
RT: 4.52 min Scan# 1068
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion: 128 Resp: 2005
Ion Ratio Lower Upper
128 100
49 158.6 0.0 333.4
130 138.6 103.4 155.2



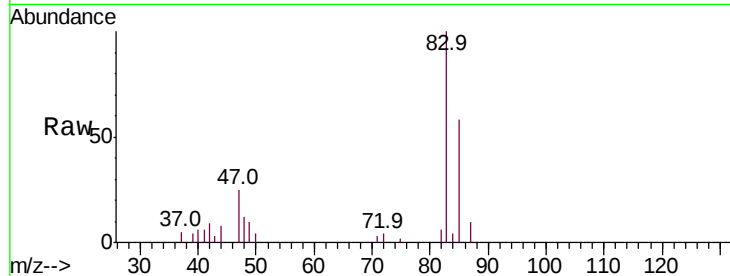


#27
Chloroform
Concen: 0.618 ug/l
RT: 4.65 min Scan# 1106
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

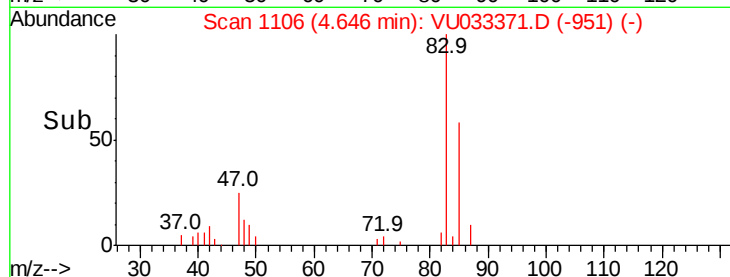
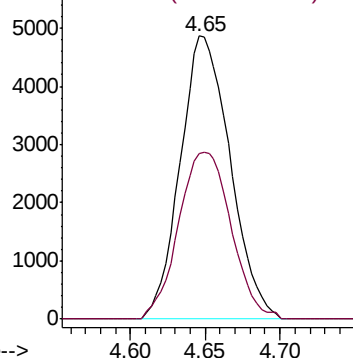
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion: 83 Resp: 11302
Ion Ratio Lower Upper
83 100
85 58.4 0.0 129.8

Manual Integrations
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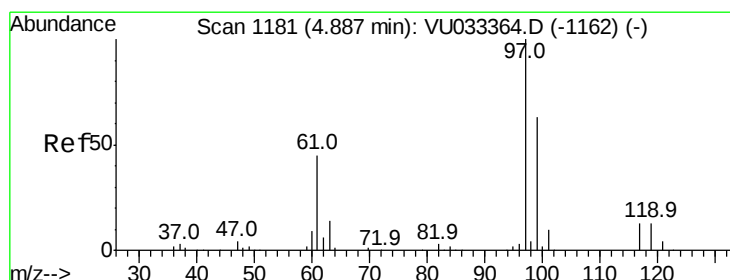


Abundance Ion 83.00 (82.70 to 83.70): VU0
Ion 85.00 (84.70 to 85.70): VU0



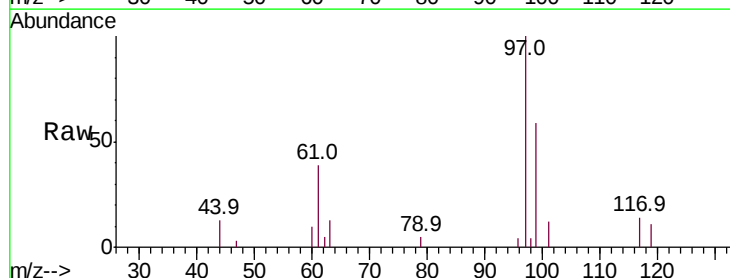
MMDadoda

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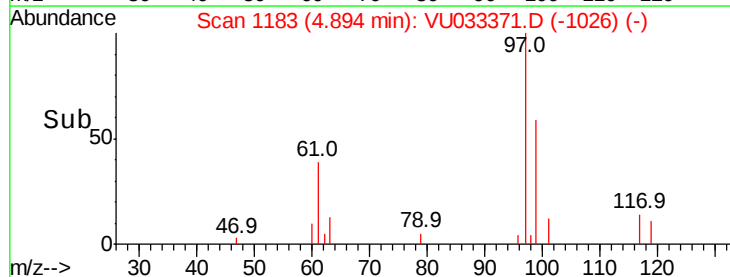
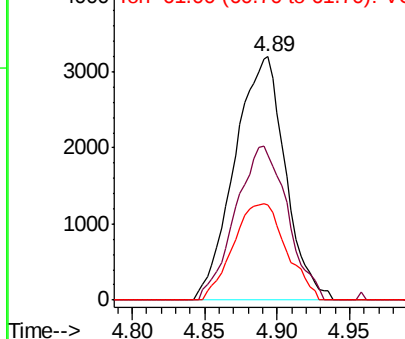


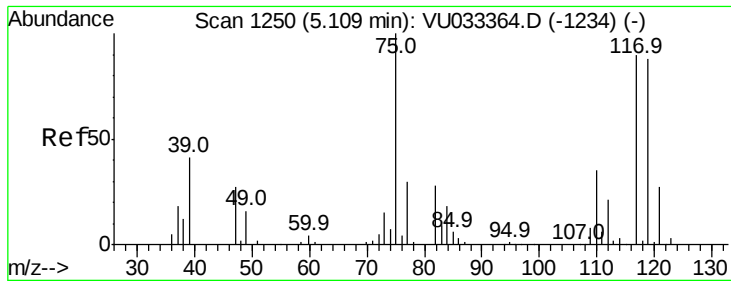
#28
1,1,1-Trichloroethane
Concen: 0.550 ug/l
RT: 4.89 min Scan# 1183
Delta R.T. 0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion: 97 Resp: 7784
Ion Ratio Lower Upper
97 100
99 64.7 31.9 95.5
61 41.3 22.7 68.0



Abundance Ion 97.00 (96.70 to 97.70): VU0
Ion 99.00 (98.70 to 99.70): VU0
Ion 61.00 (60.70 to 61.70): VU0



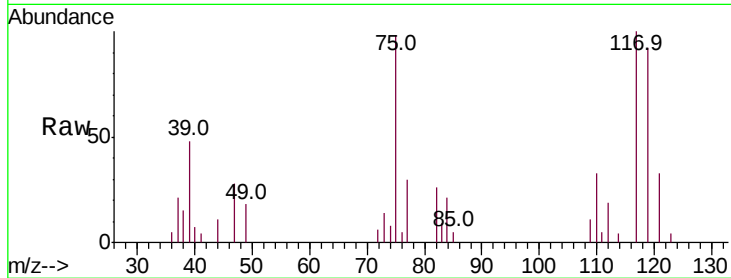


#29
 1,1-Dichloropropene
 Concen: 0.529 ug/l
 RT: 5.11 min Scan# 1250
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

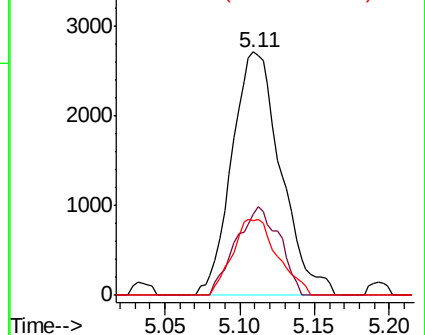
Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
75	100		
110	32.3	17.5	52.6
77	28.8	25.1	37.7

Manual Integrations
 APPROVED

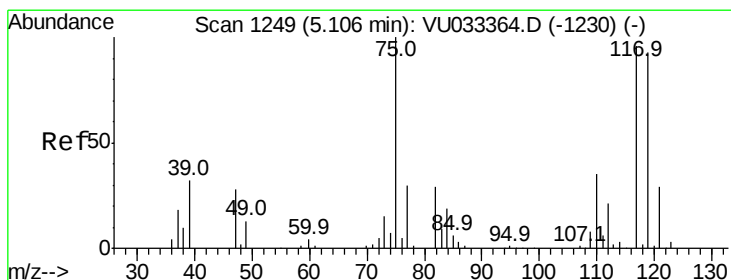
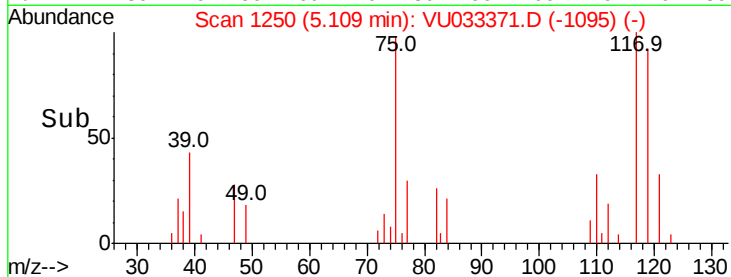


Abundance Ion 75.00 (74.70 to 75.70): VU0
 Ion 110.00 (109.70 to 110.70): V
 Ion 77.00 (76.70 to 77.70): VU0



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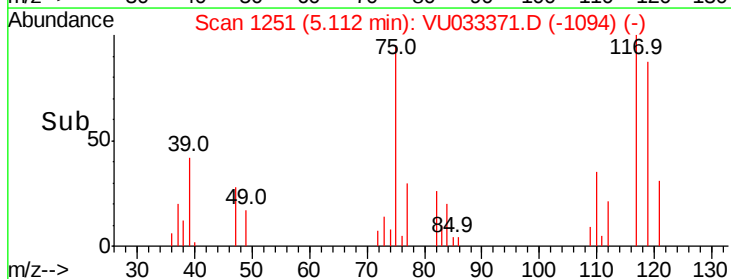
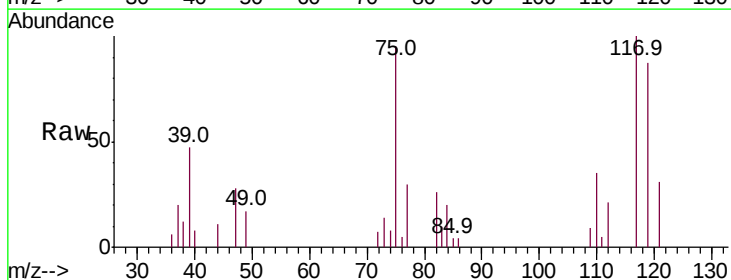
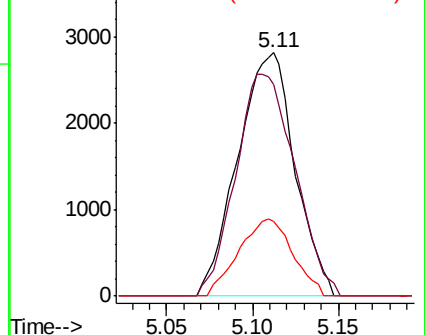
7/25/2019 11:15:32 AM

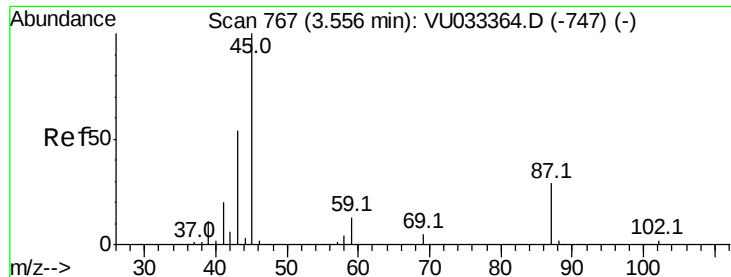


#30
 Carbon Tetrachloride
 Concen: 0.522 ug/l
 RT: 5.11 min Scan# 1251
 Delta R.T. 0.01 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
117	100		
119	86.9	77.9	116.9
121	30.6	24.0	36.0

Abundance Ion 117.00 (116.70 to 117.70): V
 Ion 119.00 (118.70 to 119.70): V
 Ion 121.00 (120.70 to 121.70): V





#31

Isopropyl Ether

Concen: 0.520 ug/l

RT: 3.55 min Scan# 766

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

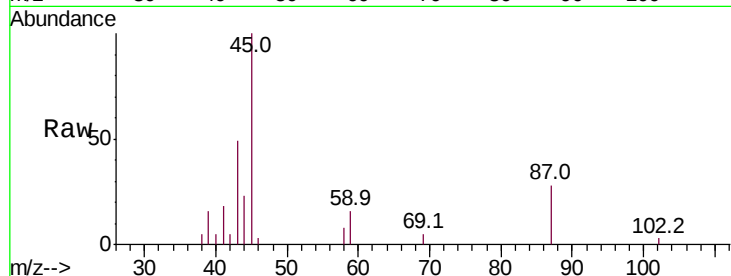
Tot Ion: 45 Resp: 10513

Ion Ratio Lower Upper

45 100

43 56.0 27.8 83.3

Manual Integrations
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Abundance Ion 45.00 (44.70 to 45.70): VU033364.D (-747) (-)

Ion 43.00 (42.70 to 43.70): VU033364.D (-747) (-)

3.55

4000

3000

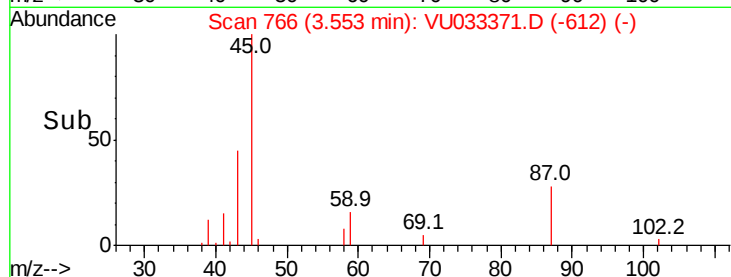
2000

1000

0

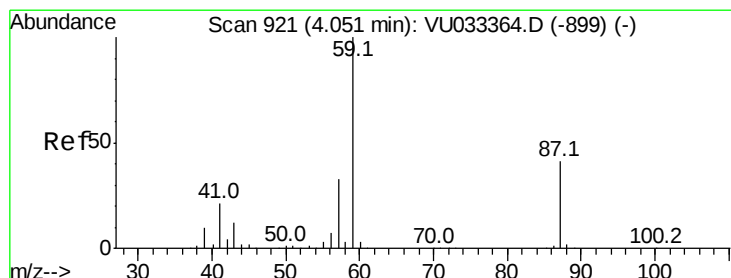
3.50 3.55 3.60 3.65

Time-->



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#32

Ethyl-t-butyl ether

Concen: 0.510 ug/l

RT: 4.04 min Scan# 919

Delta R.T. -0.01 min

Lab File: VU033371.D

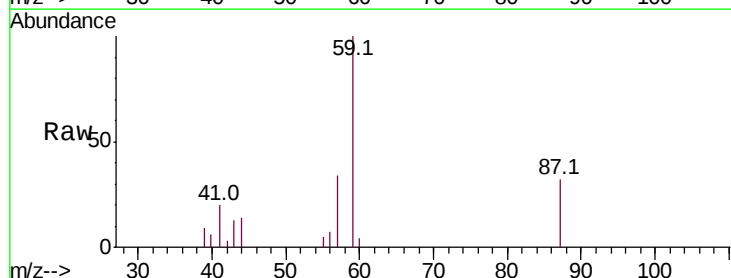
Acq: 23 Jul 2019 10:33

Tgt Ion: 59 Resp: 9911

Ion Ratio Lower Upper

59 100

87 40.1 33.8 50.6



Abundance Ion 59.00 (58.70 to 59.70): VU033364.D (-899) (-)

Ion 87.00 (86.70 to 87.70): VU033364.D (-899) (-)

4.04

4000

3000

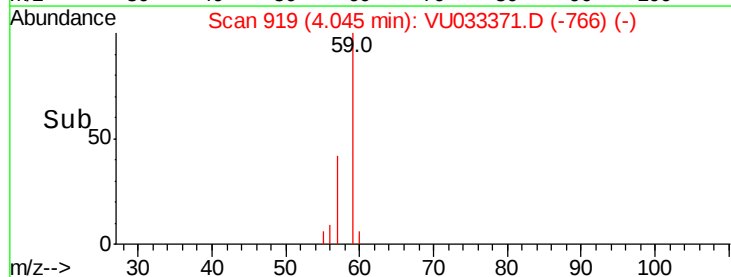
2000

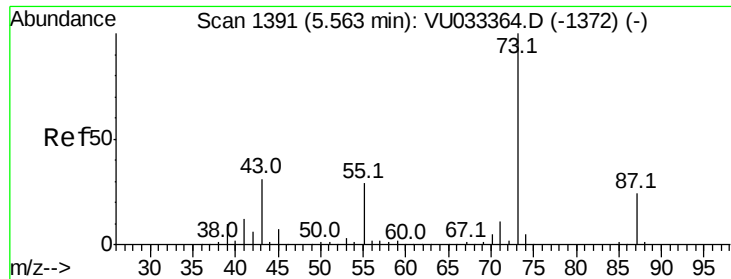
1000

0

3.95 4.00 4.05 4.10 4.15

Time-->



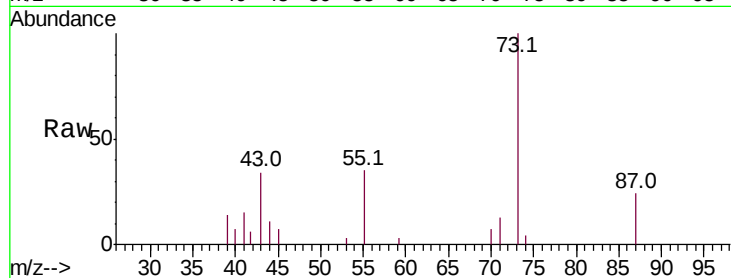


#33
Tert-Amvl methvl ether
Concen: 0.463 ug/l
RT: 5.56 min Scan# 1390
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

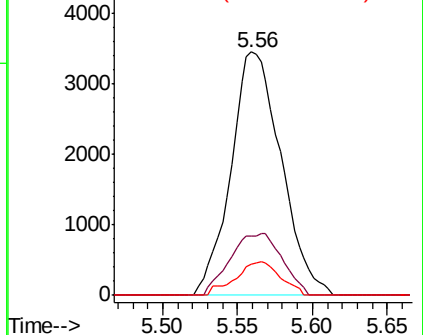
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
73	100		
87	26.4	18.9	28.3
71	12.3	9.3	13.9

Manual Integrations
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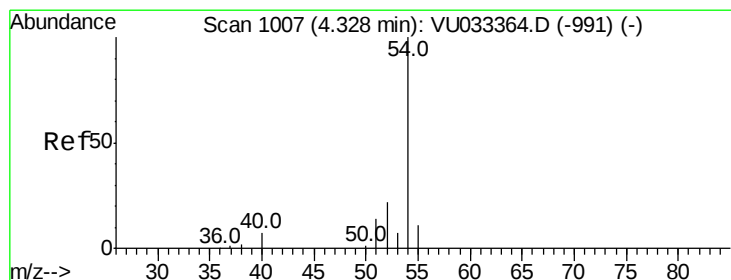
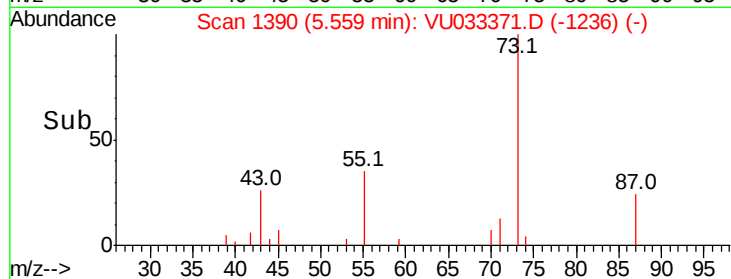


Abundance Ion 73.00 (72.70 to 73.70): VU0
Ion 87.00 (86.70 to 87.70): VU0
Ion 71.00 (70.70 to 71.70): VU0



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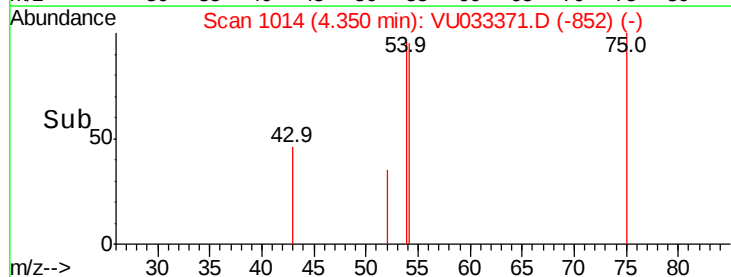
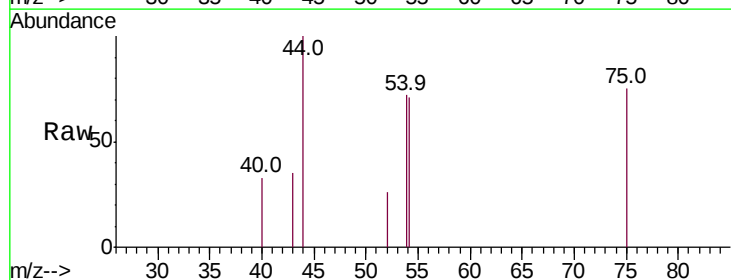
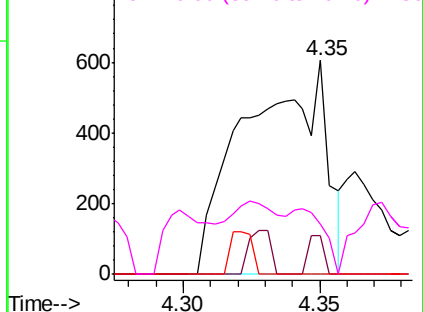
7/25/2019 11:15:32 AM

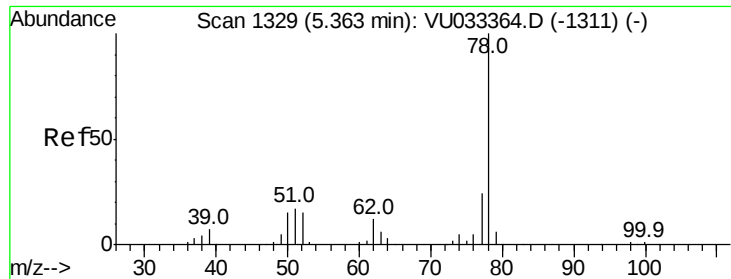


#34
Propionitrile
Concen: 1.876 ug/l
RT: 4.35 min Scan# 1014
Delta R.T. 0.02 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
54	100		
52	3.4	17.1	25.7#
55	0.0	11.6	17.4#
40	22.3	3.5	5.3#

Abundance Ion 54.00 (53.70 to 54.70): VU0
Ion 52.00 (51.70 to 52.70): VU0
Ion 55.00 (54.70 to 55.70): VU0
Ion 40.00 (39.70 to 40.70): VU0





#35

Benzene

Concen: 0.512 ug/l

RT: 5.37 min Scan# 1330

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

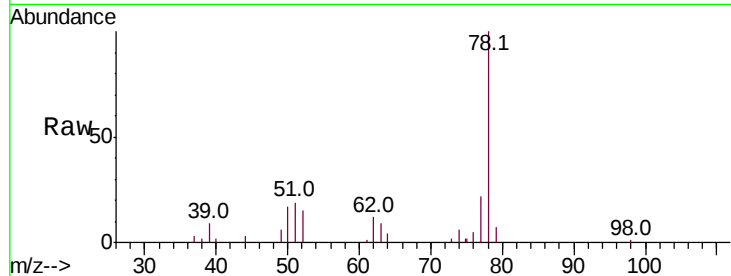
Tot Ion: 78 Resp: 17268

Ion Ratio Lower Upper

78 100

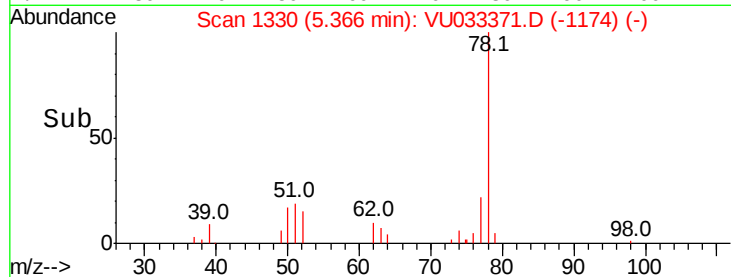
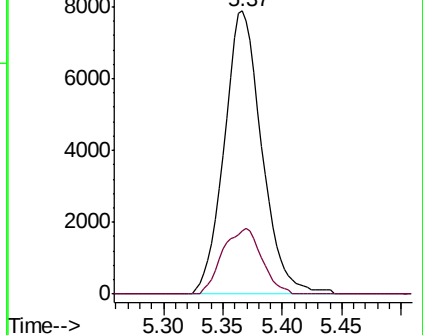
77 22.3 19.4 29.2

Manual Integrations
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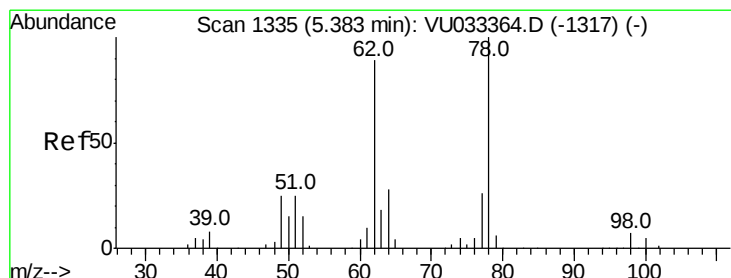
Abundance Ion 78.10 (77.80 to 78.80): VU033364.D (-1311) (-)

Ion 77.00 (76.70 to 77.70): VU033364.D (-1311) (-)



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#36

1,2-Dichloroethane

Concen: 0.511 ug/l

RT: 5.39 min Scan# 1336

Delta R.T. 0.00 min

Lab File: VU033371.D

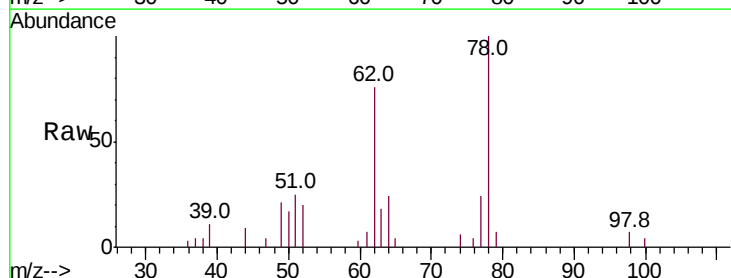
Acq: 23 Jul 2019 10:33

Tgt Ion: 62 Resp: 5740

Ion Ratio Lower Upper

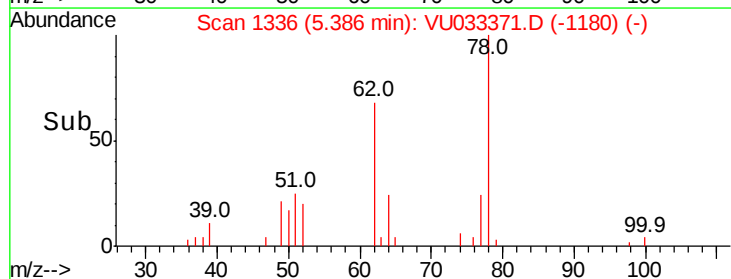
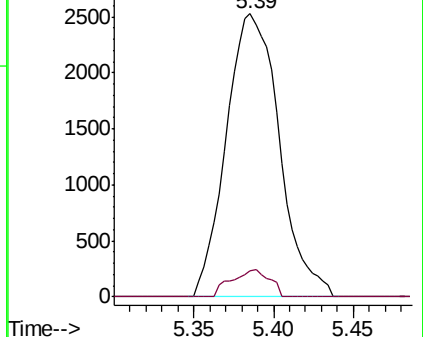
62 100

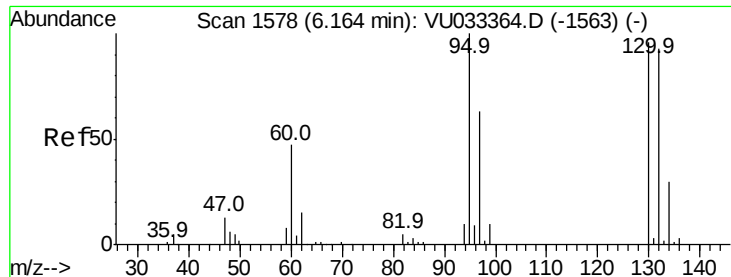
98 6.8 6.5 9.7



Abundance Ion 62.00 (61.70 to 62.70): VU033364.D (-1317) (-)

Ion 98.00 (97.70 to 98.70): VU033364.D (-1317) (-)



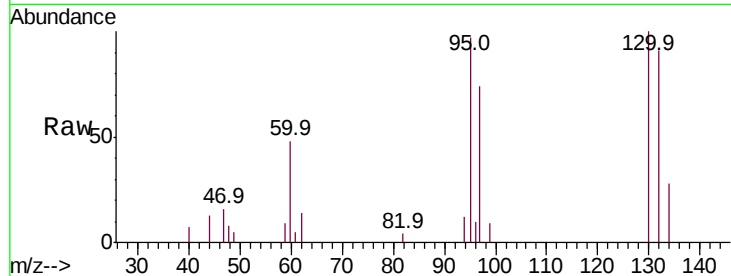


#37
 Trichloroethene
 Concen: 0.543 ug/l
 RT: 6.16 min Scan# 1578
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

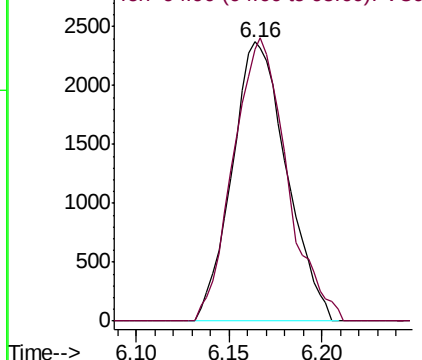
Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Tot Ion:130 Resp: 4838
 Ion Ratio Lower Upper
 130 100
 95 97.3 83.4 125.0

Manual Integrations
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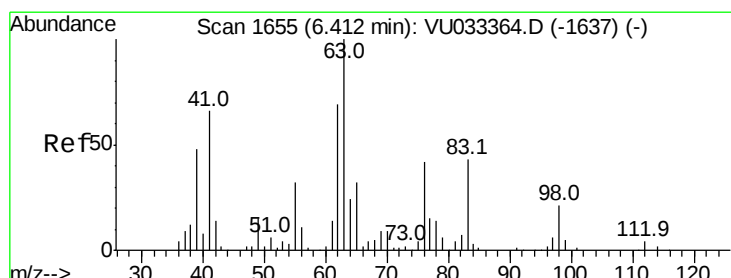
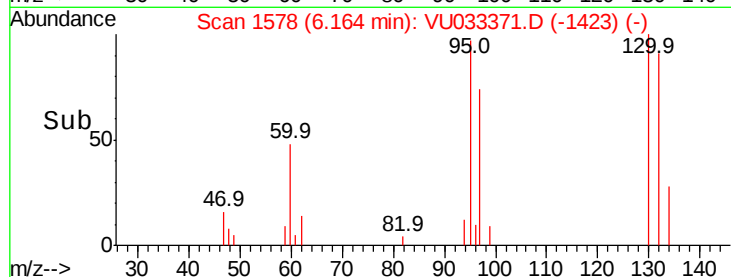


Abundance Ion 129.90 (129.60 to 130.60): VU033364.D (-1563) (-)
 Ion 94.90 (94.60 to 95.60): VU033364.D (-1563) (-)



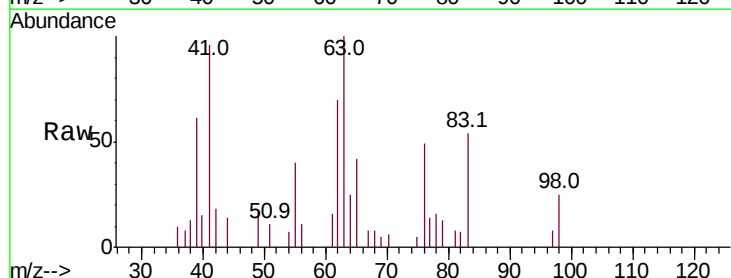
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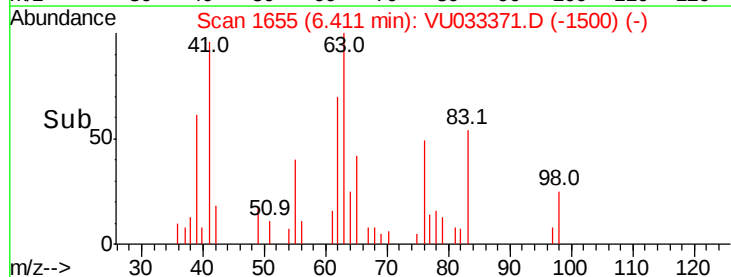
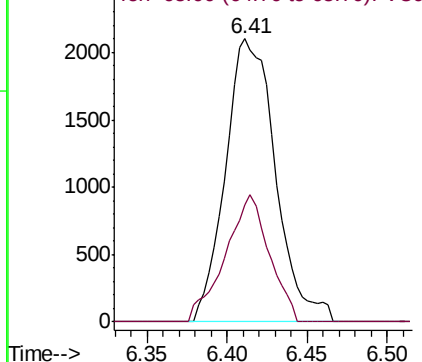


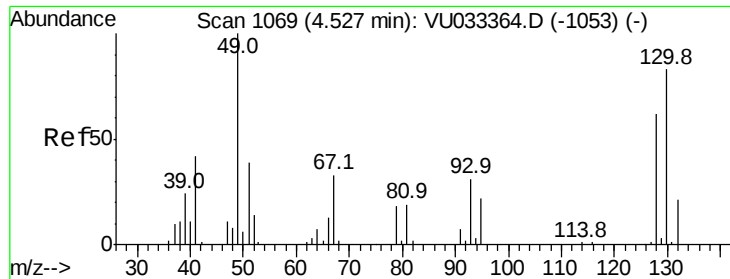
#38
 1,2-Dichloropropane
 Concen: 0.483 ug/l
 RT: 6.41 min Scan# 1655
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion: 63 Resp: 4500
 Ion Ratio Lower Upper
 63 100
 65 41.5 25.7 38.5#



Abundance Ion 63.00 (62.70 to 63.70): VU033364.D (-1637) (-)
 Ion 65.00 (64.70 to 65.70): VU033364.D (-1637) (-)





#39

Methacrylonitrile

Concen: 0.454 ug/l m

RT: 4.55 min Scan# 1075

Delta R.T. 0.02 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

Tot Ion: 41 Resp: 1181

Ion Ratio Lower Upper

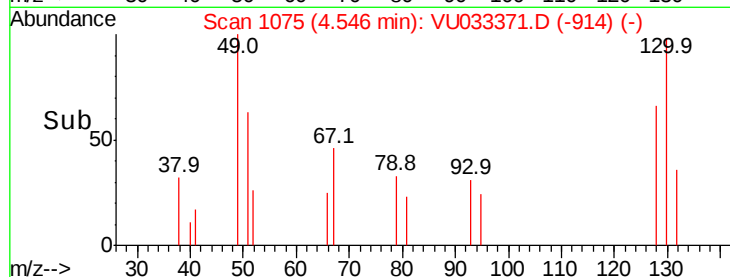
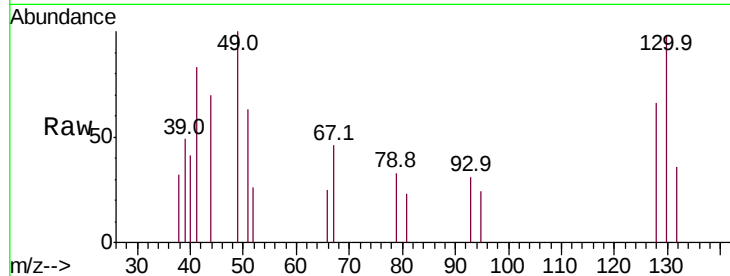
41 100

67 64.0 64.4 96.6#

39 59.9 46.8 70.2

52 18.5 28.6 42.8#

Manual Integrations
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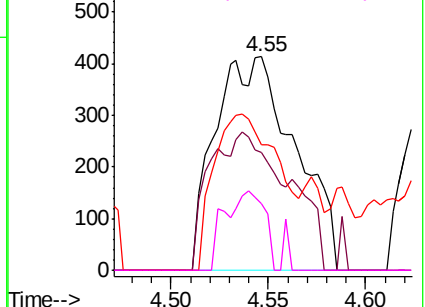


Abundance Ion 41.00 (40.70 to 41.70): VU0

Ion 67.00 (66.70 to 67.70): VU0

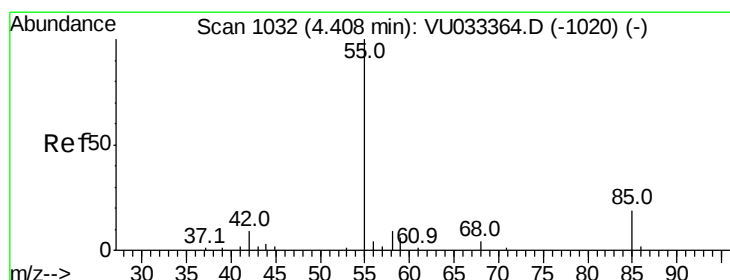
Ion 39.00 (38.70 to 39.70): VU0

Ion 52.00 (51.70 to 52.70): VU0



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#40

Methyl acrylate

Concen: 0.401 ug/l

RT: 4.42 min Scan# 1036

Delta R.T. 0.01 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tgt Ion: 55 Resp: 1621

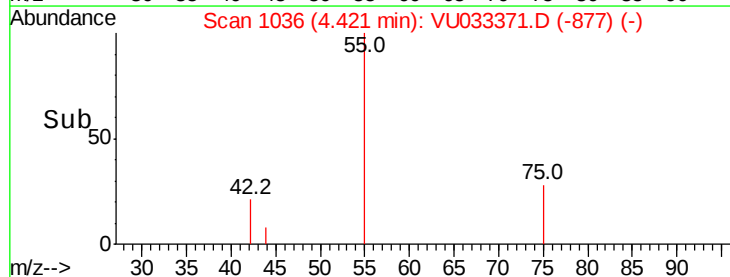
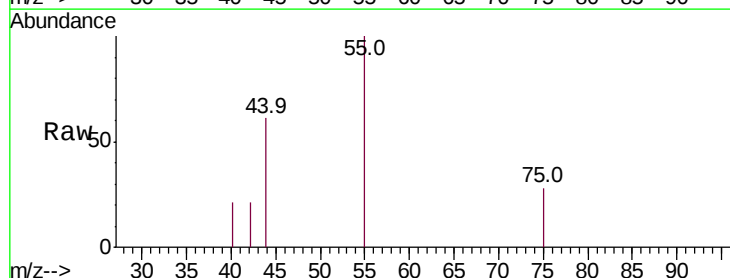
Ion Ratio Lower Upper

55 100

85 0.0 14.8 22.2#

58 2.5 7.1 10.7#

42 7.1 7.0 10.6

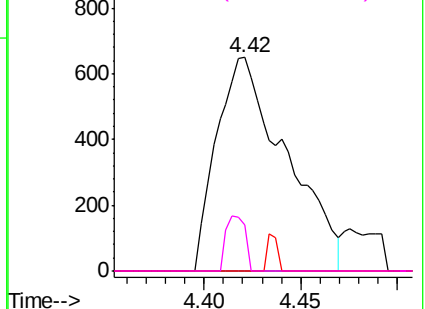


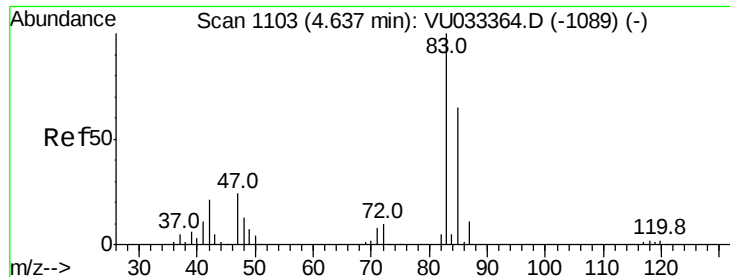
Abundance Ion 55.00 (54.70 to 55.70): VU0

Ion 85.00 (84.70 to 85.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

Ion 42.00 (41.70 to 42.70): VU0





#41

Tetrahydrofuran

Concen: 1.005 ug/l

RT: 4.63 min Scan# 1101

Delta R.T. -0.01 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

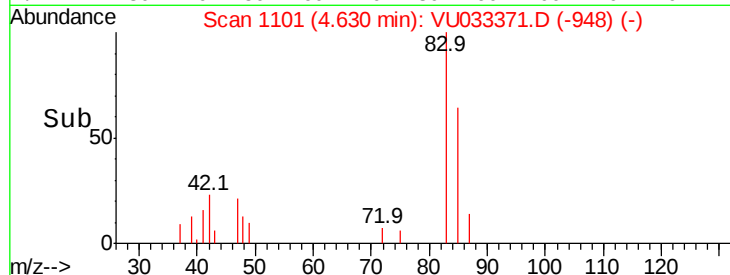
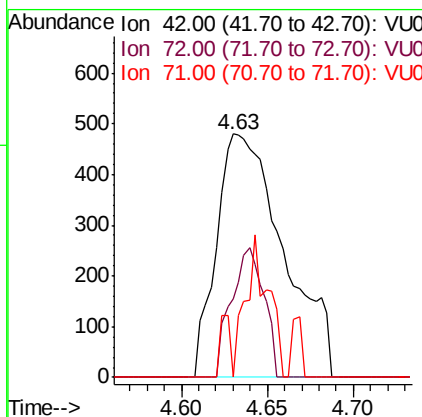
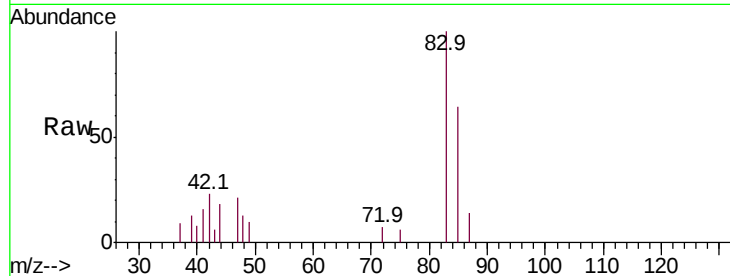
ClientSampleId :

LOQ-WATER-02-QT3-2019

Tot Ion: 42 Resp: 1310

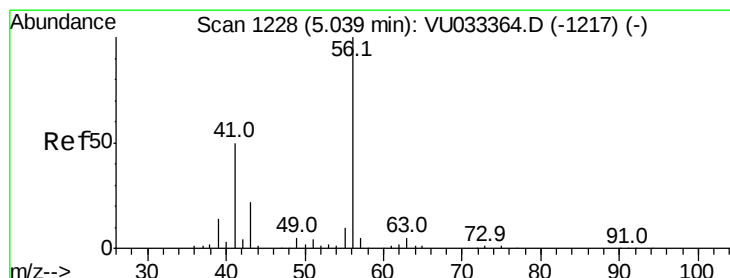
Ion	Ratio	Lower	Upper
42	100		
72	0.0	38.7	58.1#
71	3.6	34.6	52.0#

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#42

1-Chlorobutane

Concen: 0.457 ug/l

RT: 5.04 min Scan# 1230

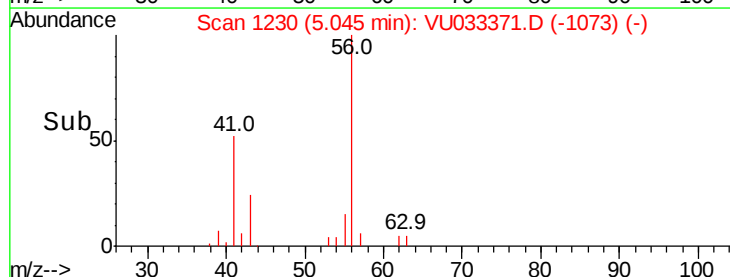
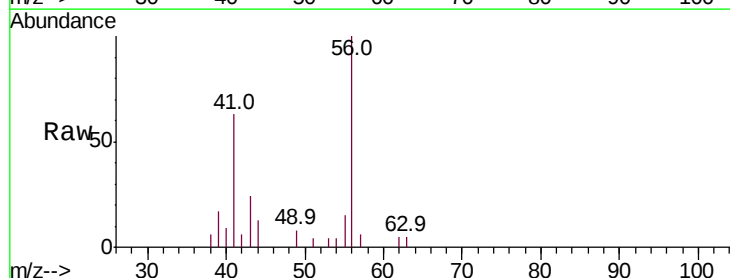
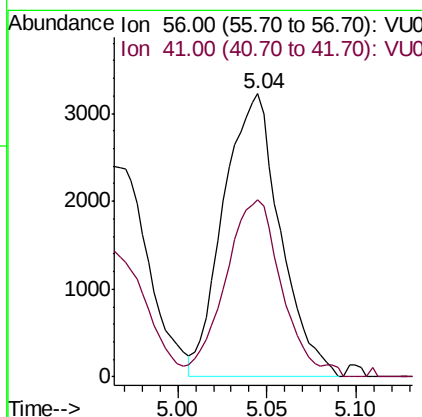
Delta R.T. 0.01 min

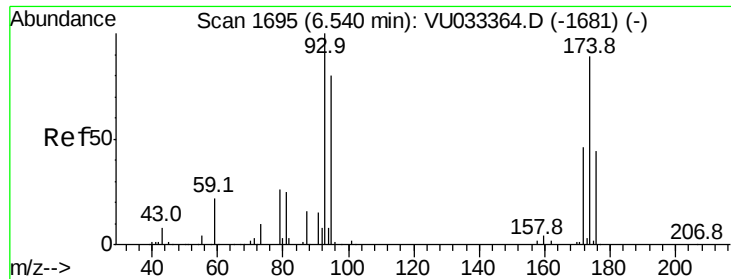
Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tgt Ion: 56 Resp: 7149

Ion	Ratio	Lower	Upper
56	100		
41	62.4	25.7	77.1





#43

Dibromomethane

Concen: 0.466 ug/l

RT: 6.54 min Scan# 1696

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

Tot Ion: 93 Resp: 2399

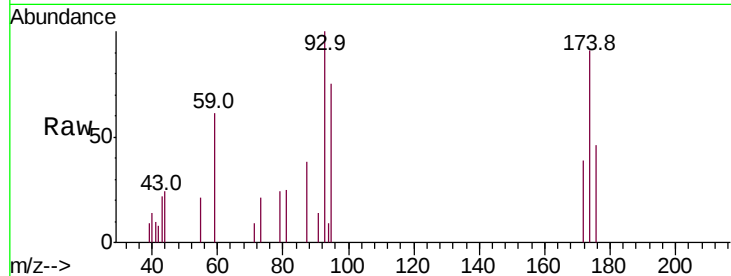
Ion Ratio Lower Upper

93 100

95 87.2 65.3 97.9

174 96.6 70.7 106.1

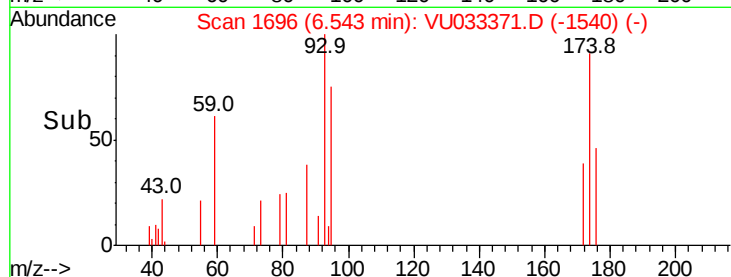
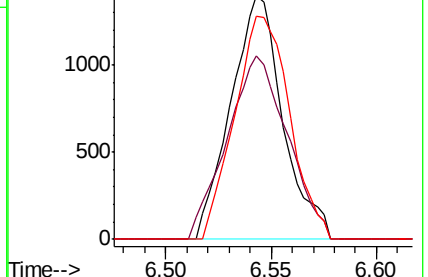
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Abundance Ion 93.00 (92.70 to 93.70): VU033371.D (-1540) (-)

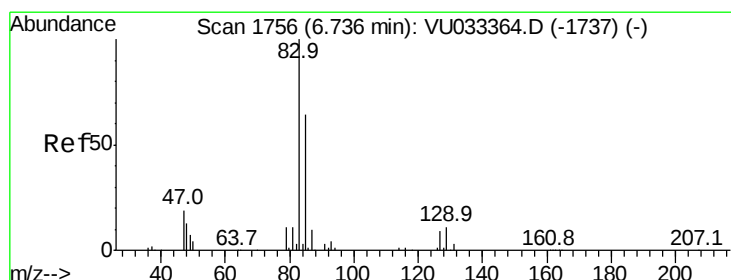
Ion 95.00 (94.70 to 95.70): VU033371.D (-1540) (-)

Ion 174.00 (173.70 to 174.70): VU033371.D (-1540) (-)



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#44

Bromodichloromethane

Concen: 0.519 ug/l

RT: 6.74 min Scan# 1756

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

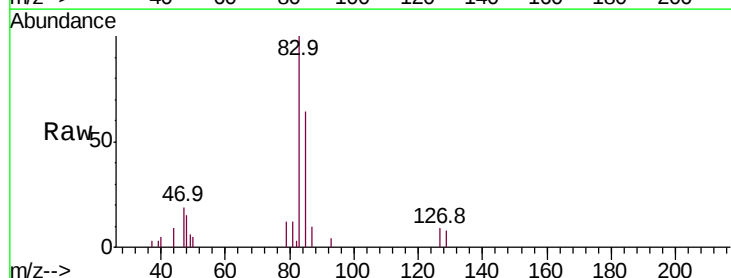
Tgt Ion: 83 Resp: 6445

Ion Ratio Lower Upper

83 100

85 64.0 51.1 76.7

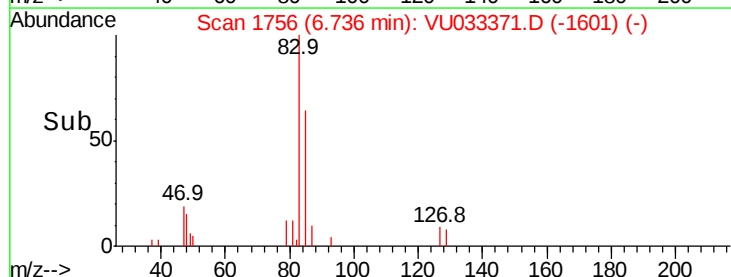
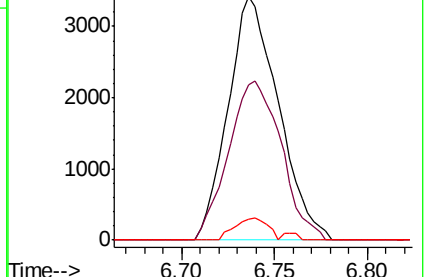
127 8.7 7.2 10.8

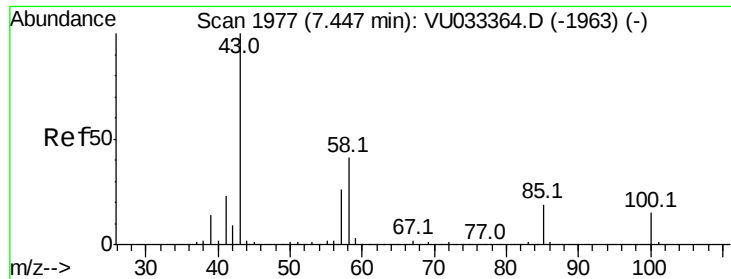


Abundance Ion 83.00 (82.70 to 83.70): VU033371.D (-1601) (-)

Ion 85.00 (84.70 to 85.70): VU033371.D (-1601) (-)

Ion 127.00 (126.70 to 127.70): VU033371.D (-1601) (-)



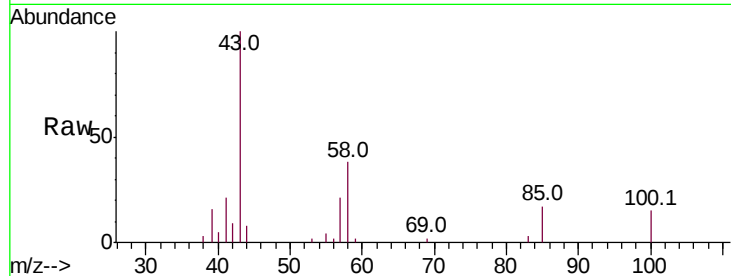


#45
4-Methyl-2-Pentanone
Concen: 2.312 ug/l
RT: 7.45 min Scan# 1978
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
43	100		
58	34.2	20.3	60.8
85	14.9	15.0	22.6

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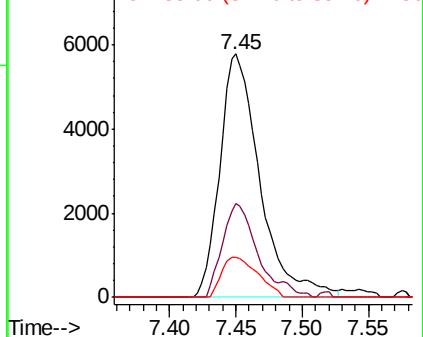


Abundance

Ion 43.00 (42.70 to 43.70): VU0

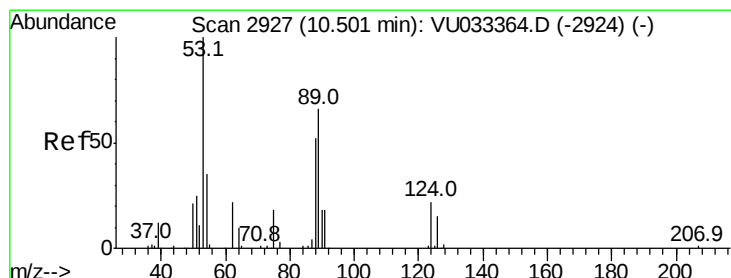
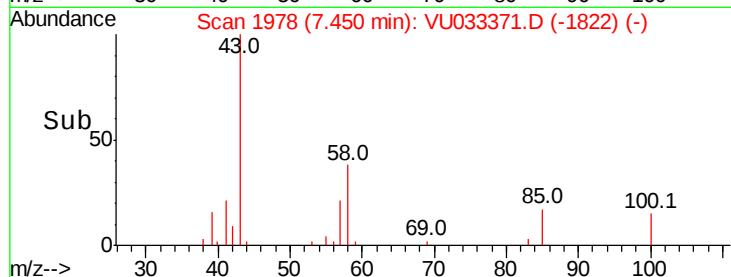
Ion 58.00 (57.70 to 58.70): VU0

Ion 85.00 (84.70 to 85.70): VU0



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#46
t-1,4-Dichloro-2-butene
Concen: 1.029 ug/l m
RT: 10.50 min Scan# 2928
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
75	100		
53	72.0	62.9	94.3
89	38.3	43.0	64.4
88	31.6	35.0	52.4

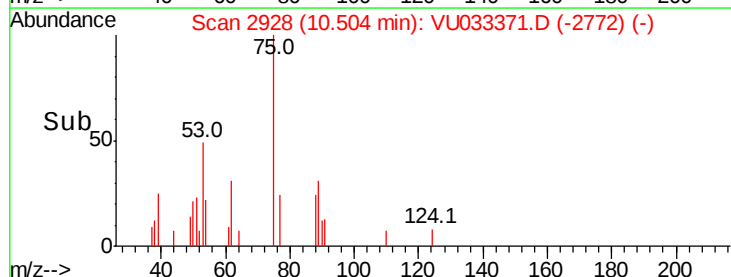
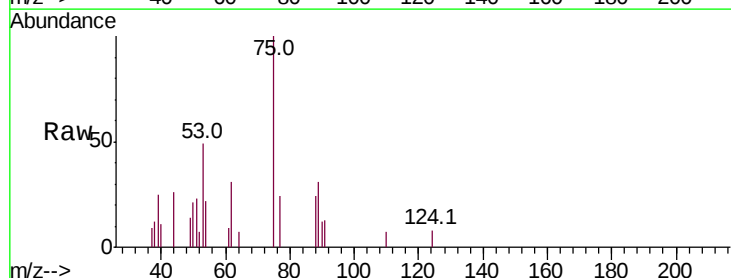
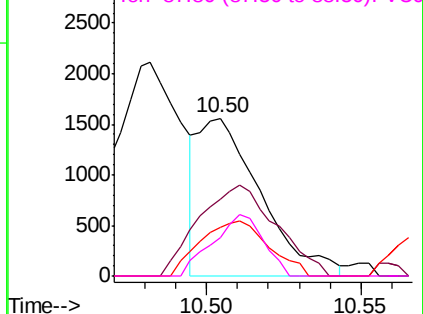
Abundance

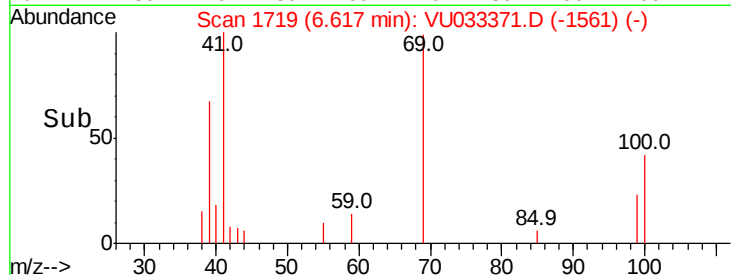
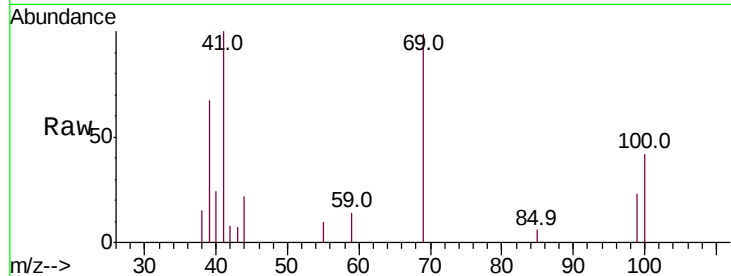
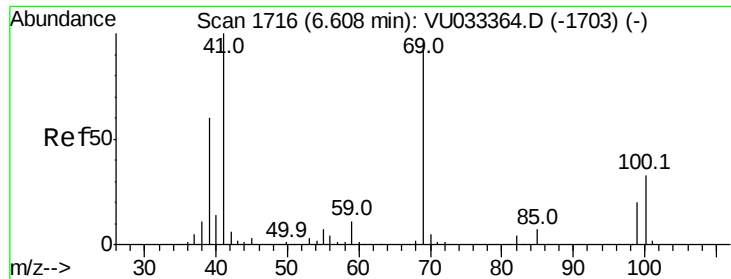
Ion 74.90 (74.60 to 75.60): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.80 (88.50 to 89.50): VU0

Ion 87.80 (87.50 to 88.50): VU0



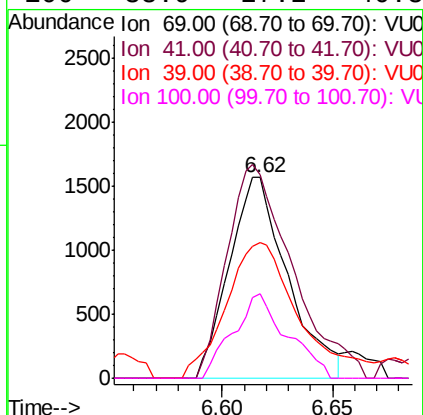


#47
Methyl methacrylate
Concen: 0.731 ug/l
RT: 6.62 min Scan# 1719
Delta R.T. 0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tot Ion	Ratio	Lower	Upper
69	100		
41	119.0	0.0	208.2
39	84.1	50.6	75.8
100	38.9	27.2	40.8

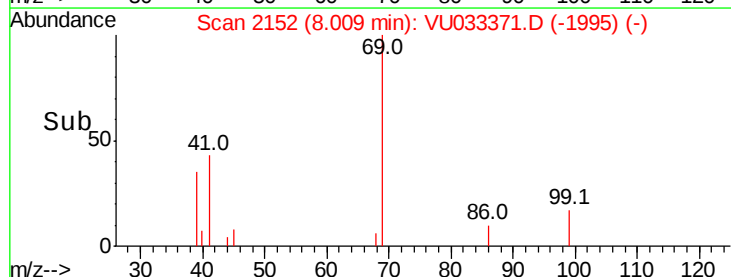
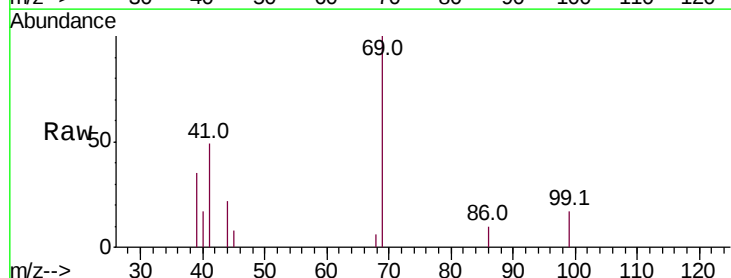
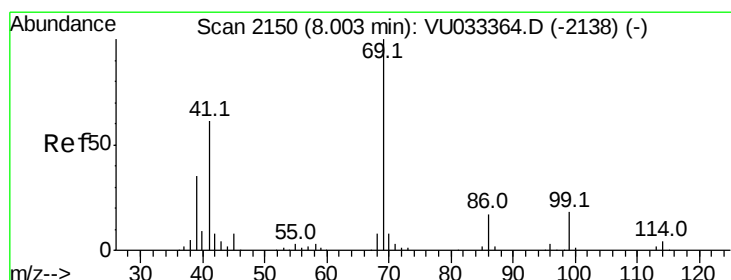
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

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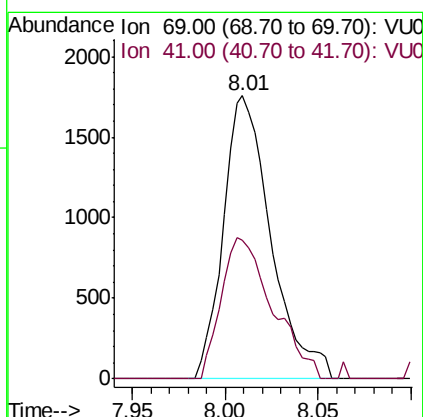
MMDadoda

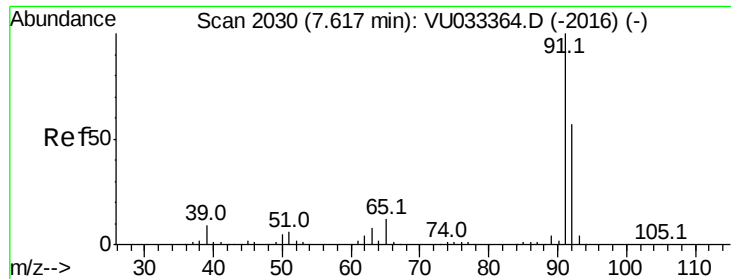
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#48
Ethyl methacrylate
Concen: 0.452 ug/l
RT: 8.01 min Scan# 2152
Delta R.T. 0.01 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
69	100		
41	53.6	30.9	92.7





#49

Toluene

Concen: 0.472 ug/l

RT: 7.62 min Scan# 2031

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

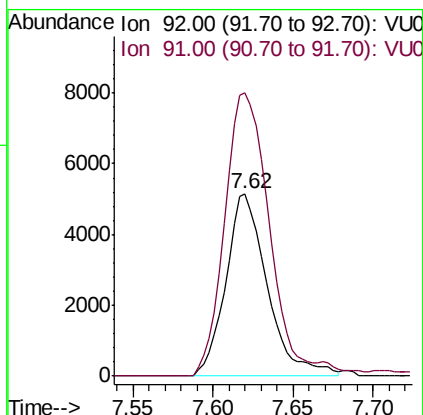
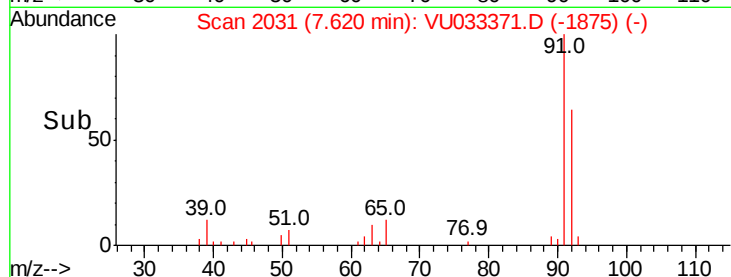
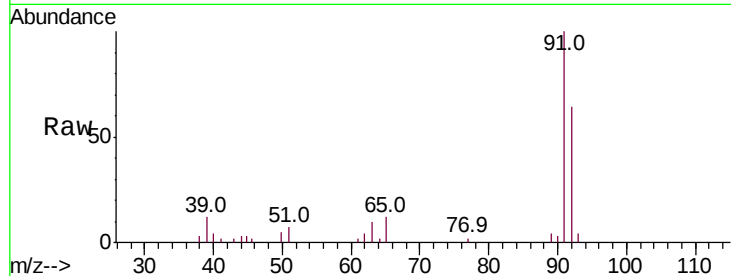
Tot Ion: 92 Resp: 9122

Ion Ratio Lower Upper

92 100

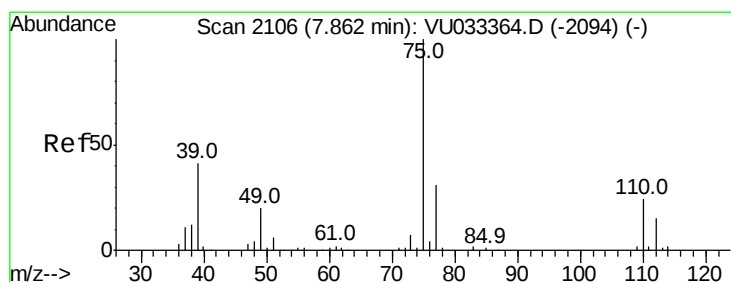
91 167.9 142.1 213.1

Manual Integrations
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#50

t-1,3-Dichloropropene

Concen: 0.443 ug/l

RT: 7.87 min Scan# 2109

Delta R.T. 0.01 min

Lab File: VU033371.D

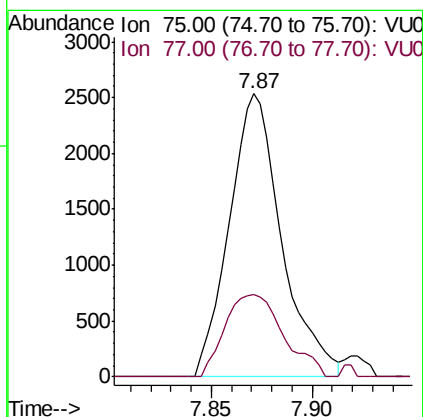
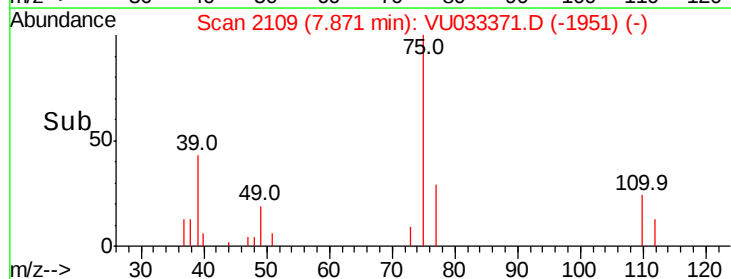
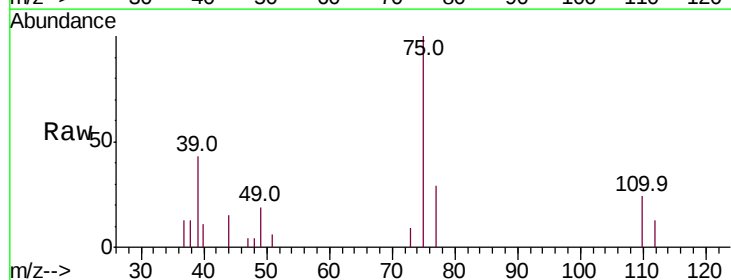
Acq: 23 Jul 2019 10:33

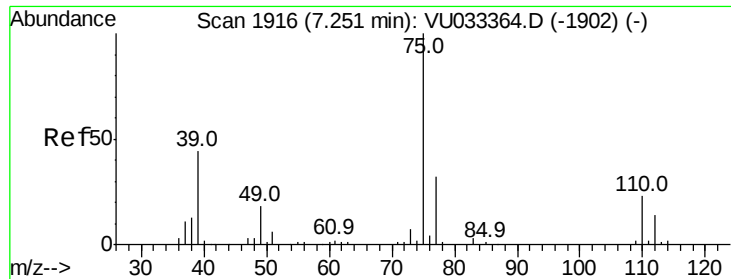
Tgt Ion: 75 Resp: 4596

Ion Ratio Lower Upper

75 100

77 29.2 25.2 37.8



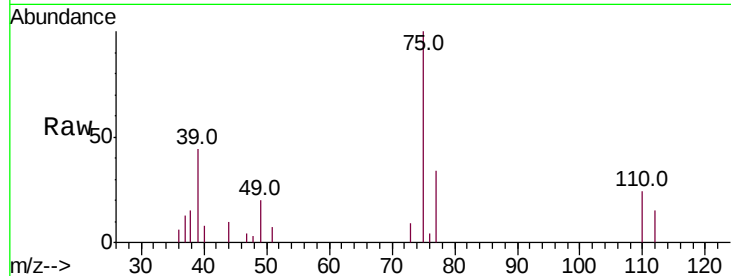


#51
 cis-1,3-Dichloropropene
 Concen: 0.478 ug/l
 RT: 7.25 min Scan# 1917
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
75	100		
77	34.1	25.8	38.8
39	40.3	35.2	52.8

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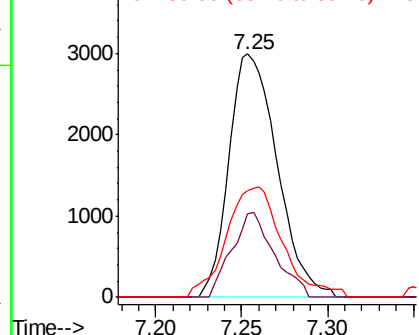


Abundance

Ion 75.00 (74.70 to 75.70): VU0

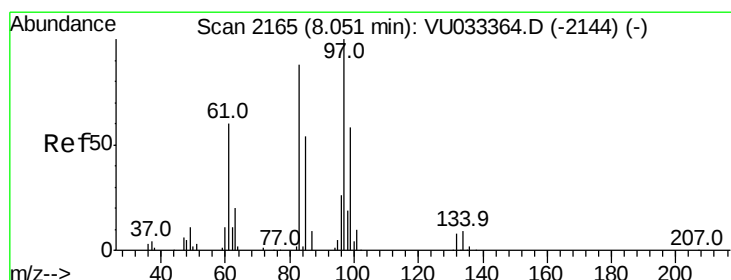
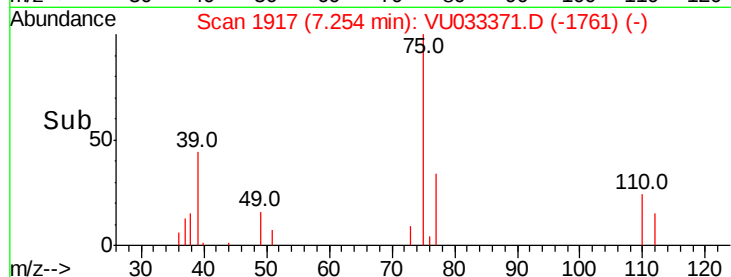
Ion 77.00 (76.70 to 77.70): VU0

Ion 39.00 (38.70 to 39.70): VU0



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#52
 1,1,2-Trichloroethane
 Concen: 0.501 ug/l
 RT: 8.05 min Scan# 2165
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
97	100		
83	74.4	70.2	105.2
85	51.4	43.5	65.3
99	54.9	47.9	71.9

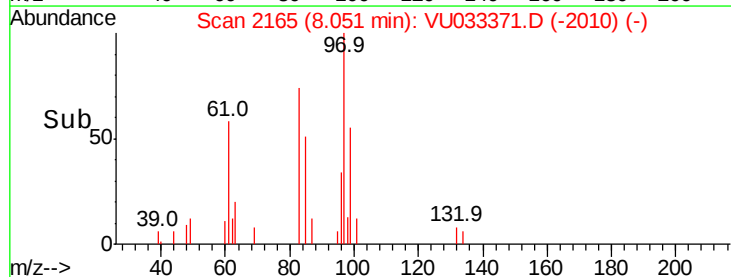
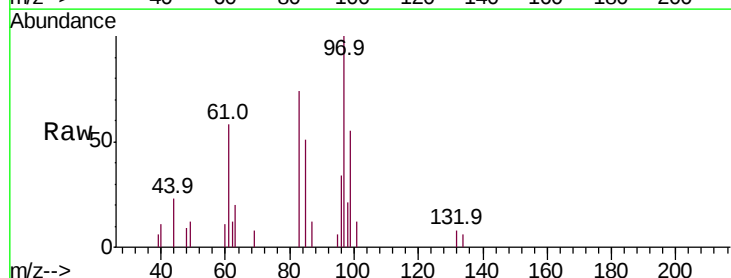
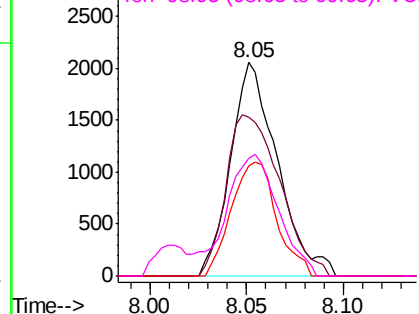
Abundance

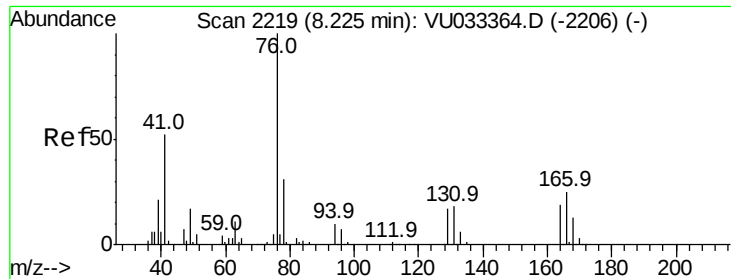
Ion 97.00 (96.70 to 97.70): VU0

Ion 82.95 (82.65 to 83.65): VU0

Ion 84.95 (84.65 to 85.65): VU0

Ion 98.95 (98.65 to 99.65): VU0



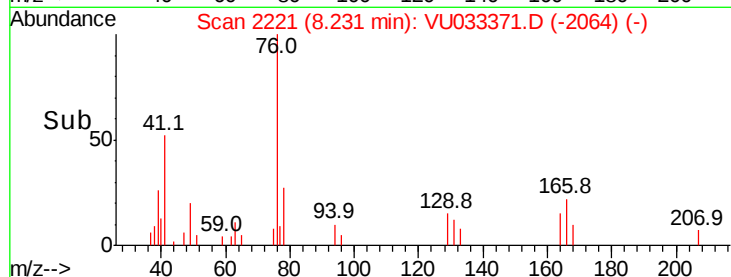
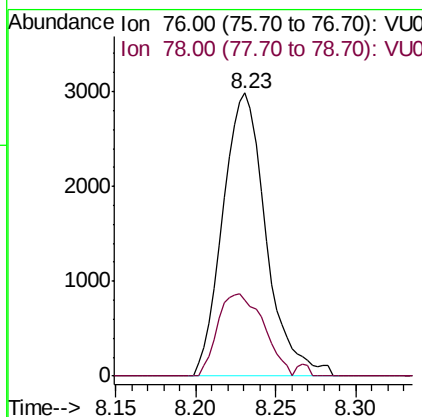
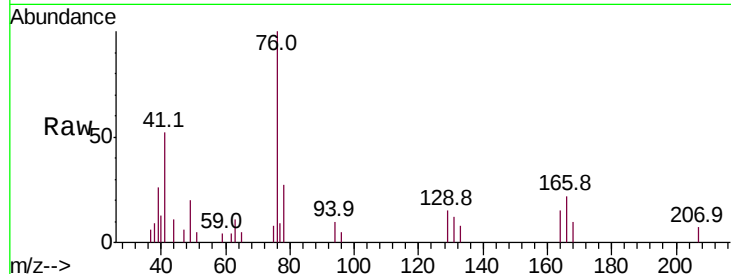


#53
 1,3-Dichloropropane
 Concen: 0.474 ug/l
 RT: 8.23 min Scan# 2221
 Delta R.T. 0.01 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

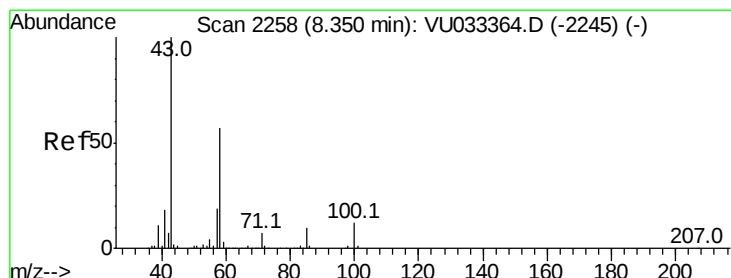
Tot Ion: 76 Resp: 5522
 Ion Ratio Lower Upper
 76 100
 78 30.9 25.7 38.5

Manual Integrations
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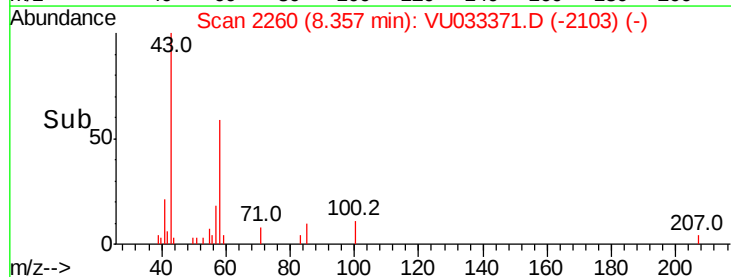
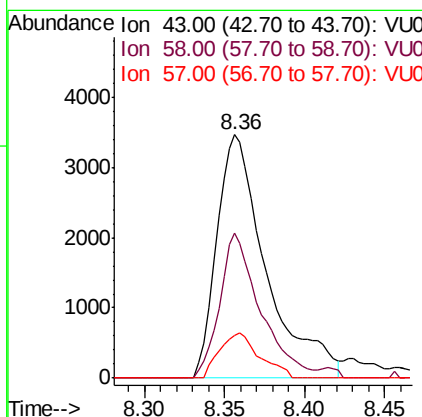
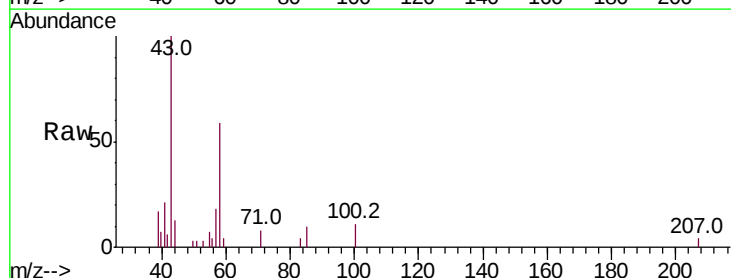
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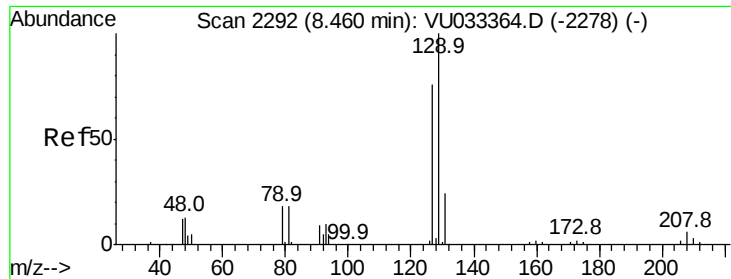
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#54
 2-Hexanone
 Concen: 1.983 ug/l
 RT: 8.36 min Scan# 2260
 Delta R.T. 0.01 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion: 43 Resp: 7337
 Ion Ratio Lower Upper
 43 100
 58 48.6 36.0 76.0
 57 15.0 0.0 39.4





#55

Dibromochloromethane

Concen: 0.495 ug/l

RT: 8.46 min Scan# 2292

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

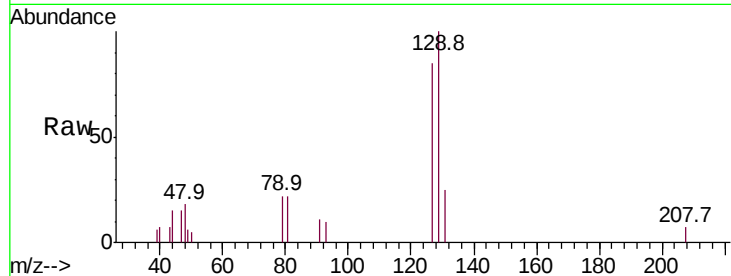
Tot Ion:129 Resp: 3982

Ion Ratio Lower Upper

129 100

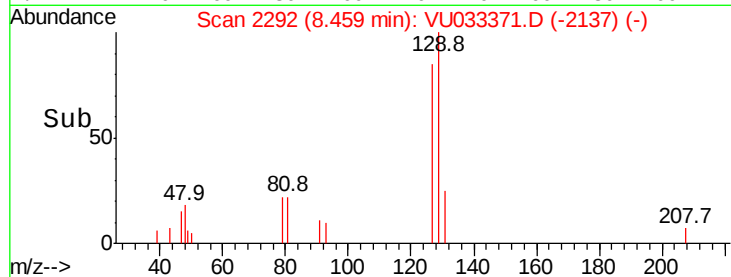
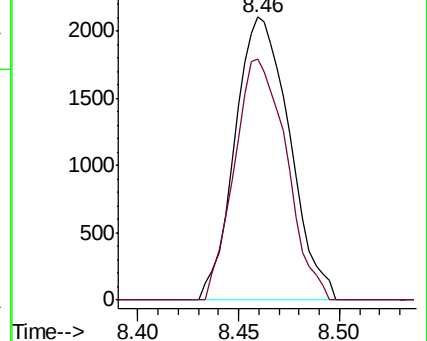
127 81.4 60.9 91.3

Manual Integrations
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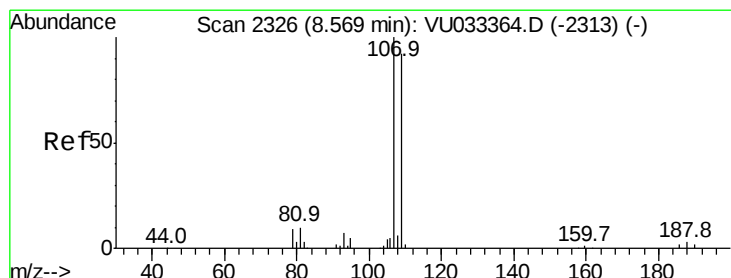
Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



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#56

1,2-Dibromoethane

Concen: 0.447 ug/l

RT: 8.58 min Scan# 2328

Delta R.T. 0.01 min

Lab File: VU033371.D

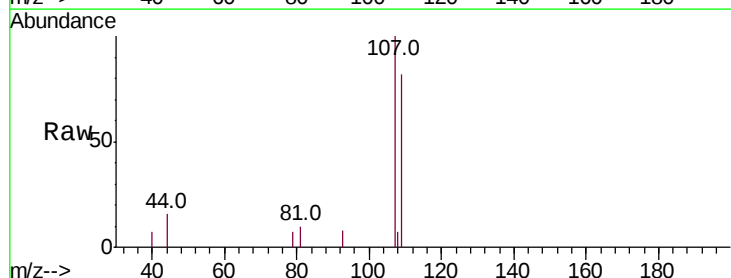
Acq: 23 Jul 2019 10:33

Tgt Ion:107 Resp: 2871

Ion Ratio Lower Upper

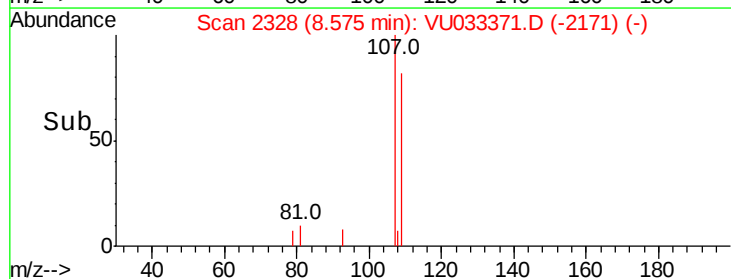
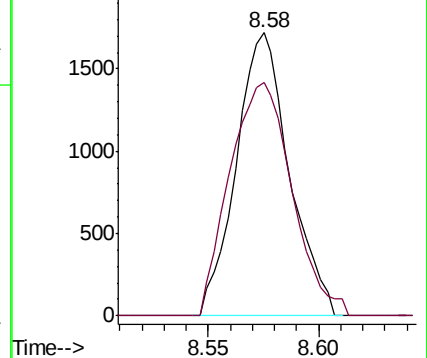
107 100

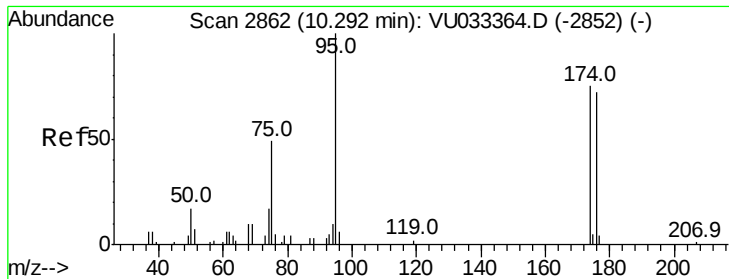
109 96.5 0.0 184.8



Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V



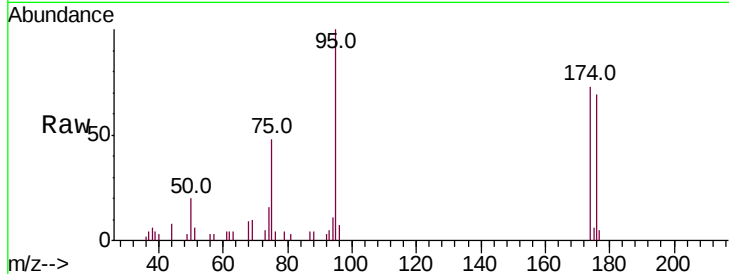


#57
4-Bromofluorobenzene
Concen: 0.924 ug/l
RT: 10.30 min Scan# 2863
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

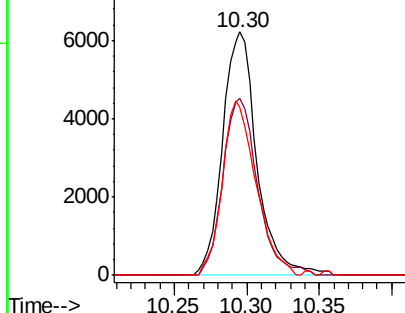
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
95	100		
174	73.6	58.8	88.2
176	70.2	54.4	81.6

Manual Integrations
APPROVED

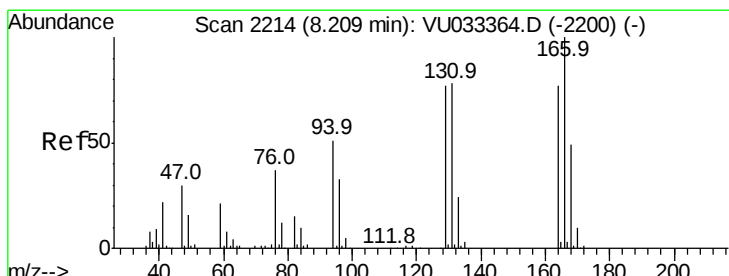
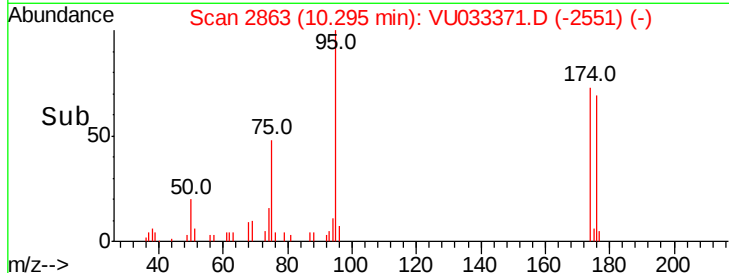


Abundance Ion 95.00 (94.70 to 95.70): VU033371.D (-2551) (-)
Ion 174.00 (173.70 to 174.70): VU033371.D (-2551) (-)
Ion 176.00 (175.70 to 176.70): VU033371.D (-2551) (-)



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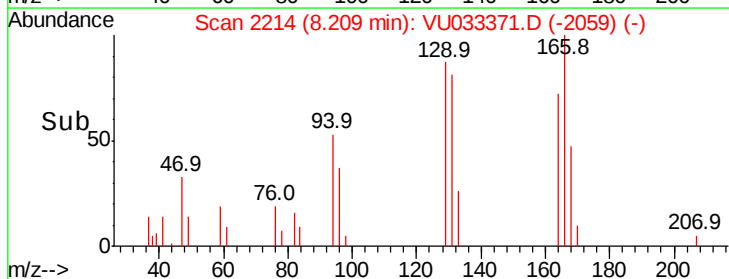
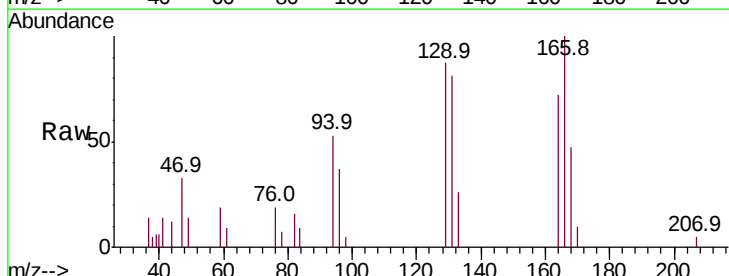
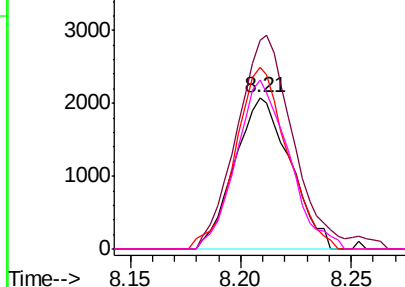
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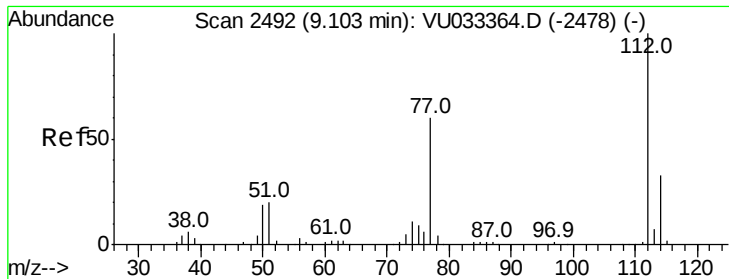


#58
Tetrachloroethene
Concen: 0.449 ug/l
RT: 8.21 min Scan# 2214
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
164	100		
166	138.0	103.8	155.6
129	120.7	79.7	119.5#
131	111.4	80.5	120.7

Abundance Ion 163.85 (163.55 to 164.55): VU033371.D (-2059) (-)
Ion 165.80 (165.50 to 166.50): VU033371.D (-2059) (-)
Ion 128.90 (128.60 to 129.60): VU033371.D (-2059) (-)
Ion 130.90 (130.60 to 131.60): VU033371.D (-2059) (-)



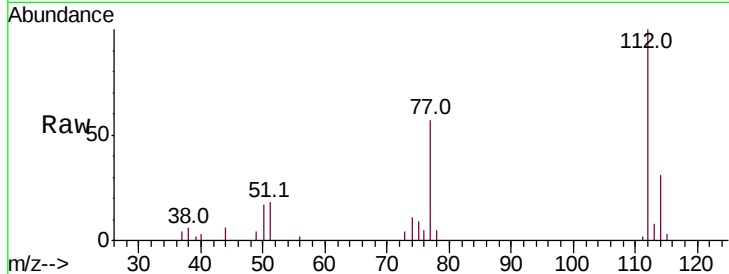


#59
Chlorobenzene
Concen: 0.485 ug/l
RT: 9.10 min Scan# 2492
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

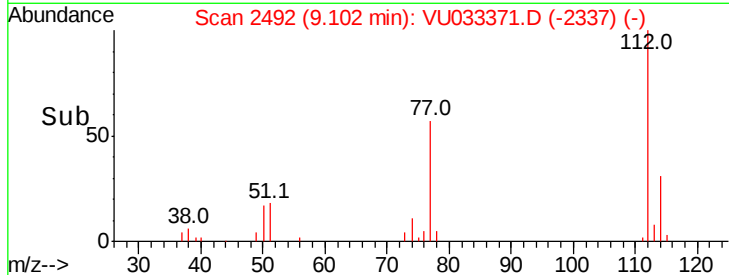
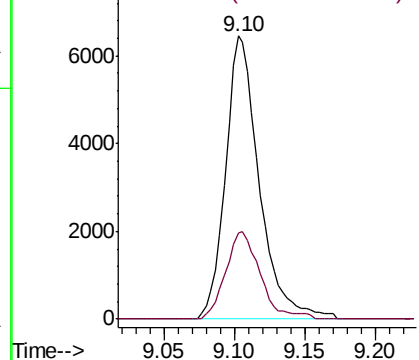
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion:112 Resp: 10736
Ion Ratio Lower Upper
112 100
114 30.7 26.4 39.6

Manual Integrations
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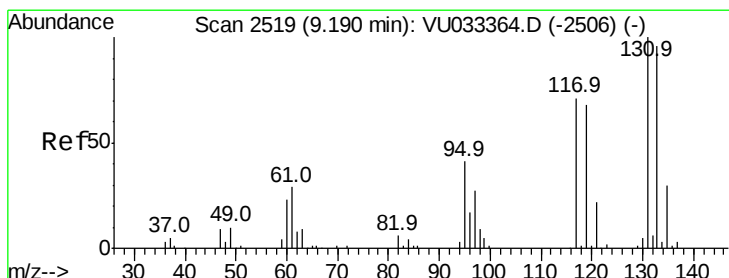


Abundance Ion 112.00 (111.70 to 112.70): V
Ion 114.00 (113.70 to 114.70): V



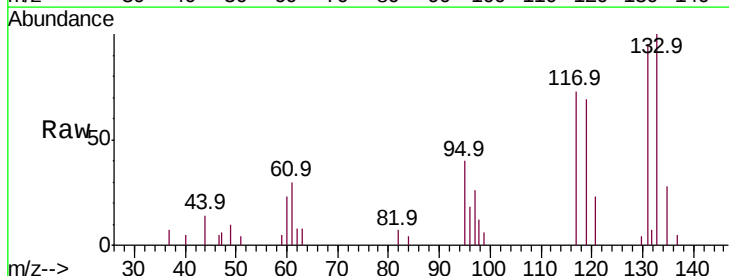
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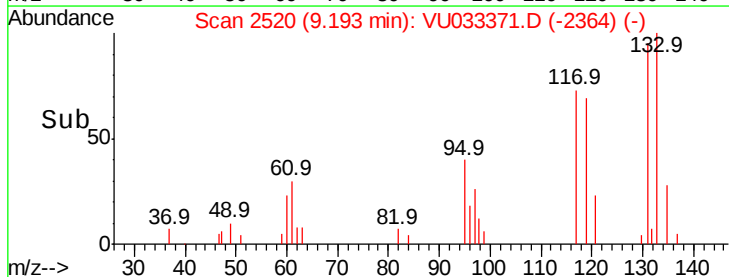
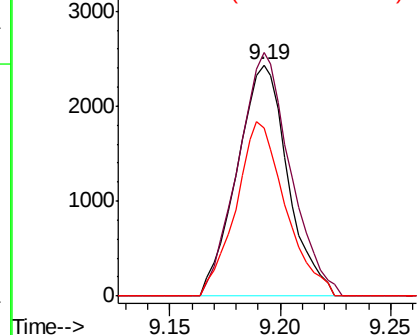


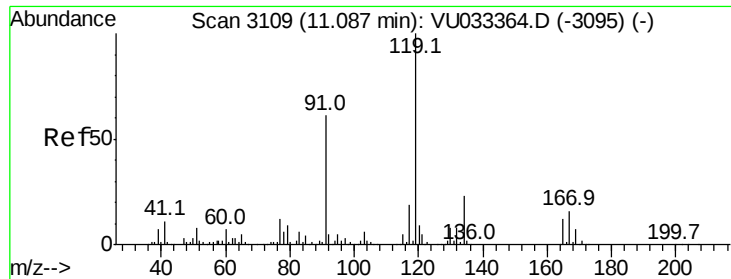
#60
1,1,1,2-Tetrachloroethane
Concen: 0.464 ug/l
RT: 9.19 min Scan# 2520
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion:131 Resp: 3901
Ion Ratio Lower Upper
131 100
133 108.1 76.2 114.4
119 73.7 54.9 82.3



Abundance Ion 131.00 (130.70 to 131.70): V
Ion 133.00 (132.70 to 133.70): V
Ion 119.00 (118.70 to 119.70): V



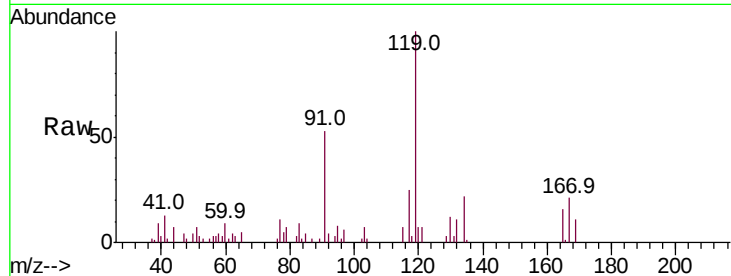


#61
Pentachloroethane
Concen: 0.541 ug/l
RT: 11.09 min Scan# 3110
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

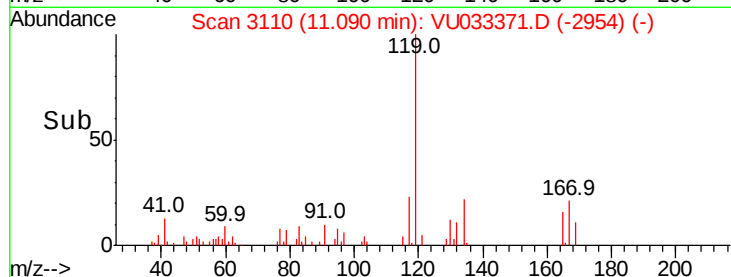
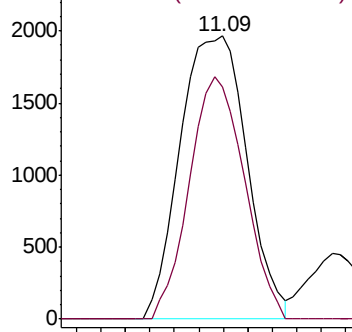
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion:117 Resp: 3735
Ion Ratio Lower Upper
117 100
167 70.5 63.4 95.0

Manual Integrations
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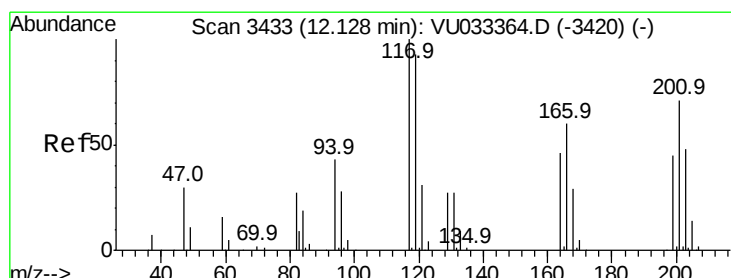


Abundance Ion 116.80 (116.50 to 117.50): V
Ion 166.70 (166.40 to 167.40): V



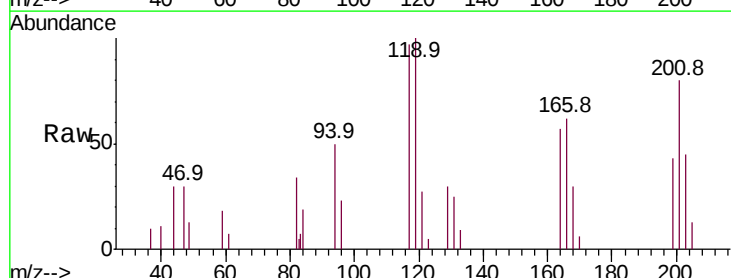
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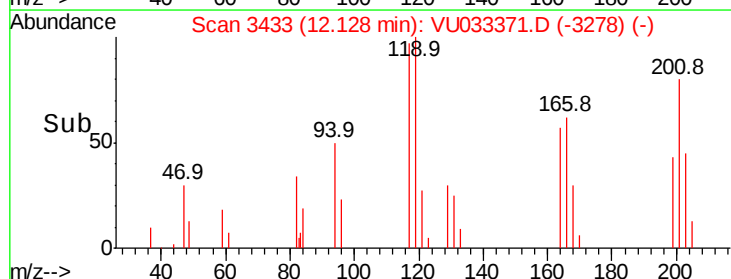
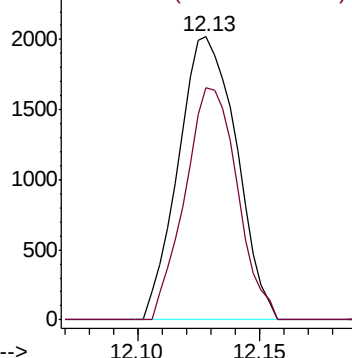


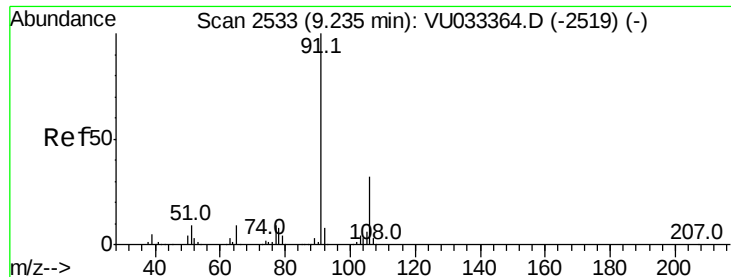
#62
Hexachloroethane
Concen: 0.500 ug/l
RT: 12.13 min Scan# 3433
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion:117 Resp: 3342
Ion Ratio Lower Upper
117 100
201 74.0 57.9 86.9



Abundance Ion 116.80 (116.50 to 117.50): V
Ion 200.60 (200.30 to 201.30): V



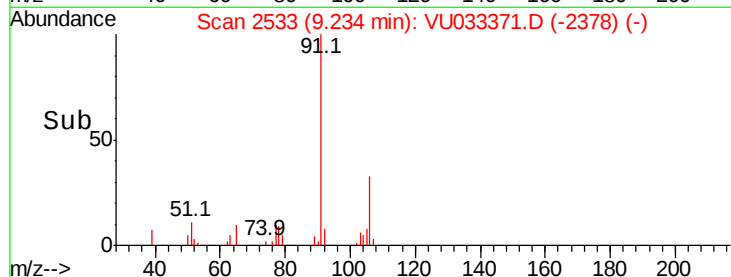
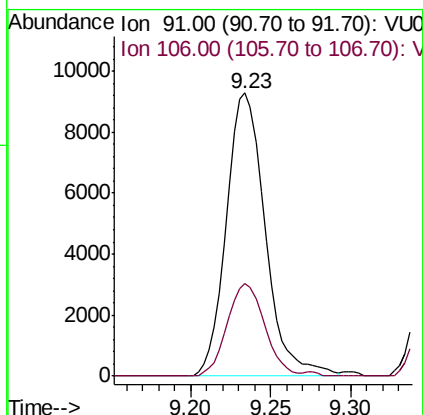
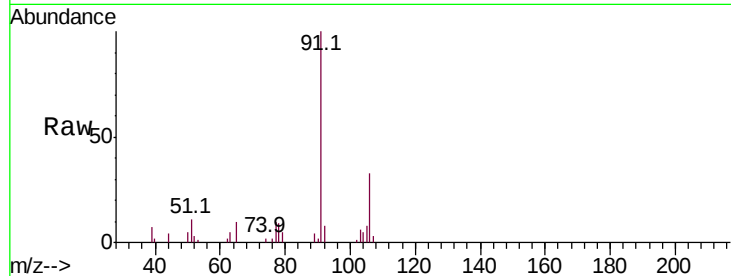


#63
Ethyl Benzene
Concen: 0.433 ug/l
RT: 9.23 min Scan# 2533
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

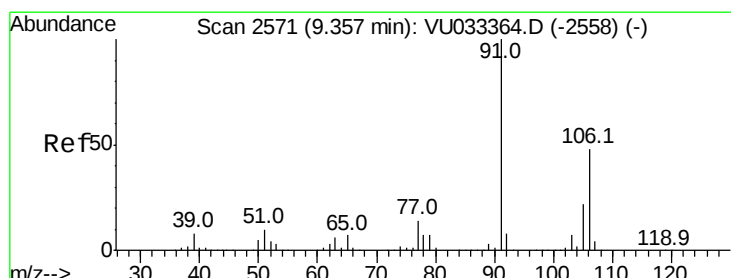
Tot Ion: 91 Resp: 15395
Ion Ratio Lower Upper
91 100
106 32.9 25.4 38.2

Manual Integrations
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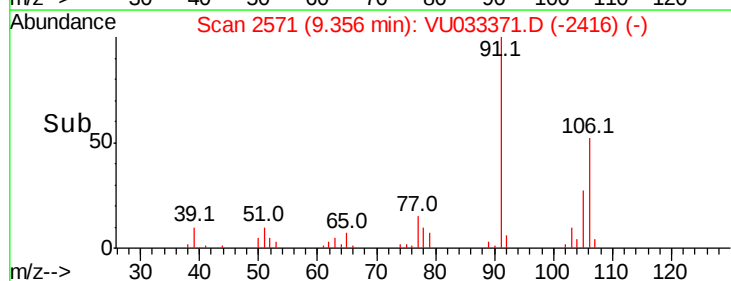
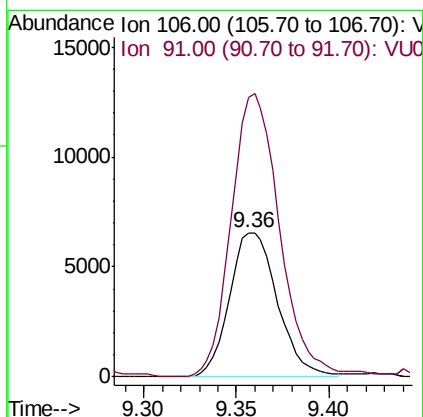
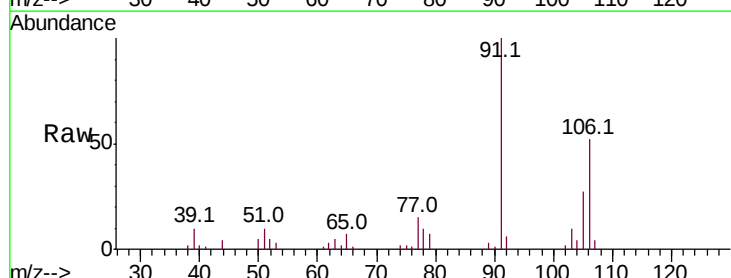
MMDadoda

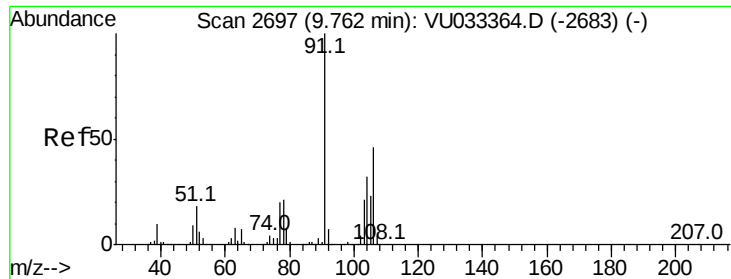
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#64
m/p-Xylenes
Concen: 0.827 ug/l
RT: 9.36 min Scan# 2571
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion: 106 Resp: 11762
Ion Ratio Lower Upper
106 100
91 198.0 167.1 250.7



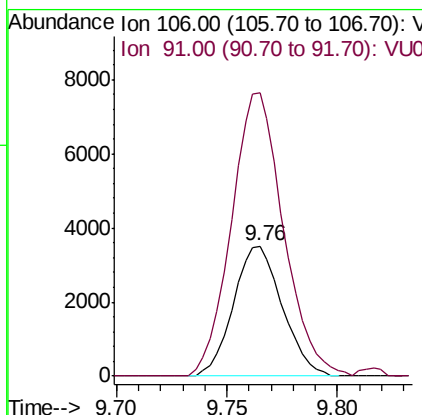
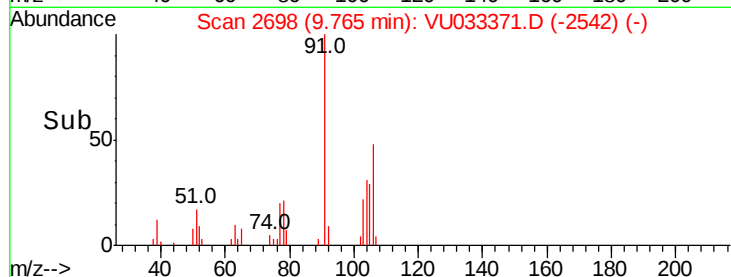
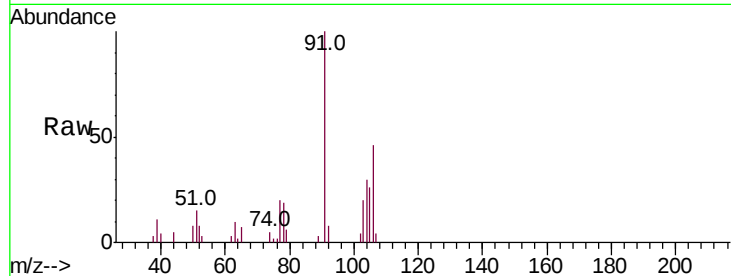


#65
o-Xylene
Concen: 0.395 ug/l
RT: 9.76 min Scan# 2698
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

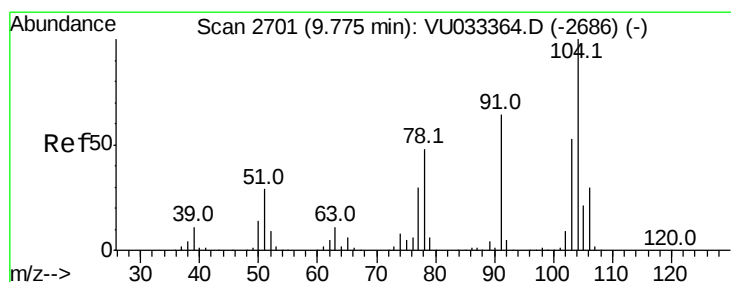
Tot Ion:106 Resp: 5381
Ion Ratio Lower Upper
106 100
91 232.3 108.5 325.3

Manual Integrations
APPROVED



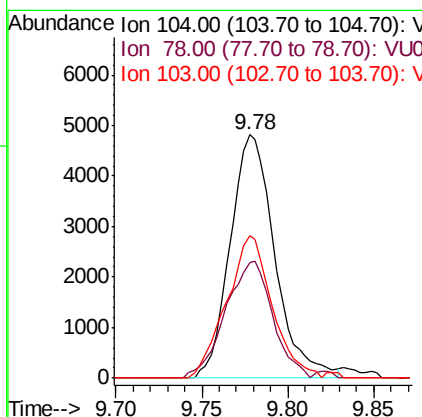
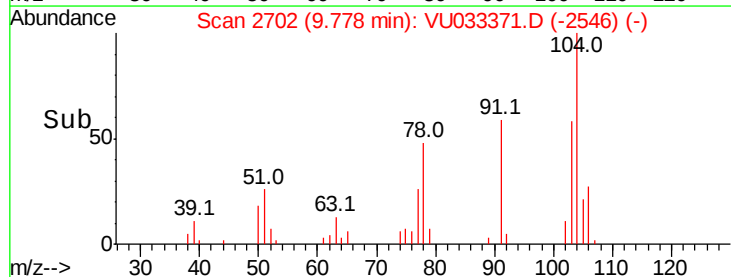
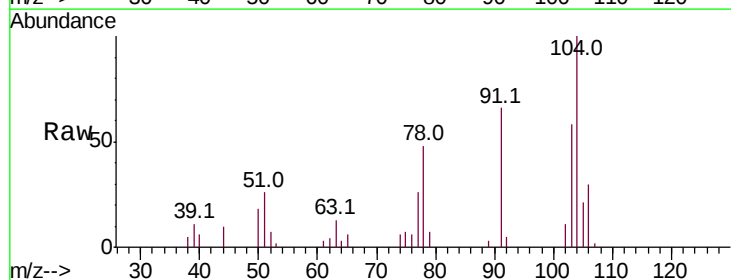
MMDadoda

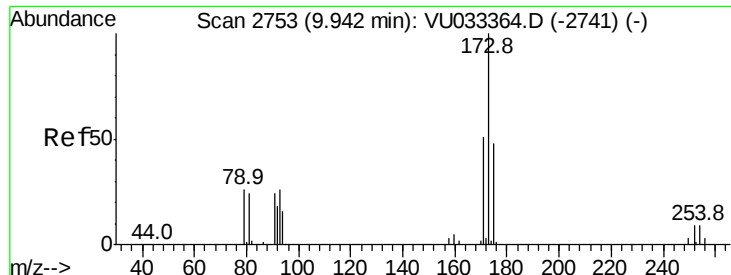
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#66
Styrene
Concen: 0.376 ug/l
RT: 9.78 min Scan# 2702
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion:104 Resp: 8687
Ion Ratio Lower Upper
104 100
78 50.7 41.2 61.8
103 59.8 44.7 67.1





#67

Bromoform

Concen: 0.467 ug/l

RT: 9.94 min Scan# 2753

Delta R.T. -0.00 min

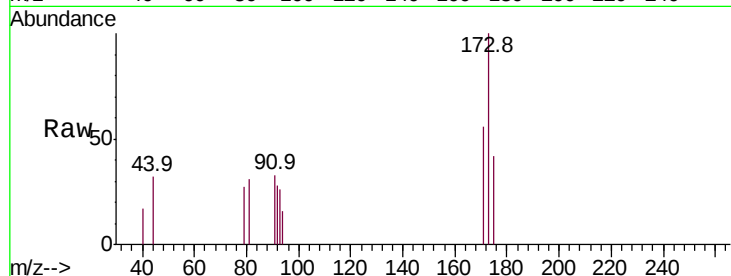
Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

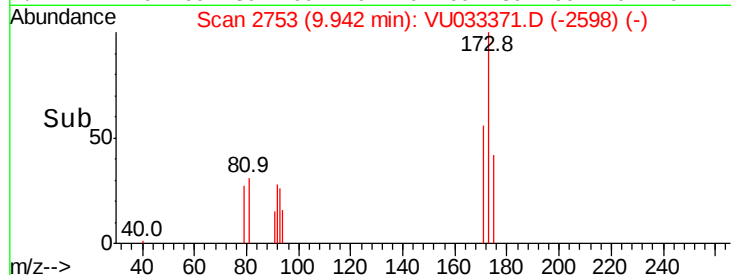
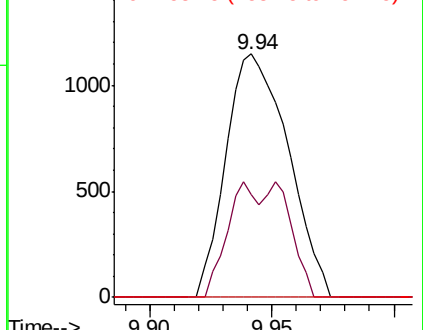
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion:	173	Resp:	2033
Ion Ratio	Lower	Upper	
173	100		
175	24.5	38.6	58.0#
254	0.0	6.8	10.2#

Manual Integrations
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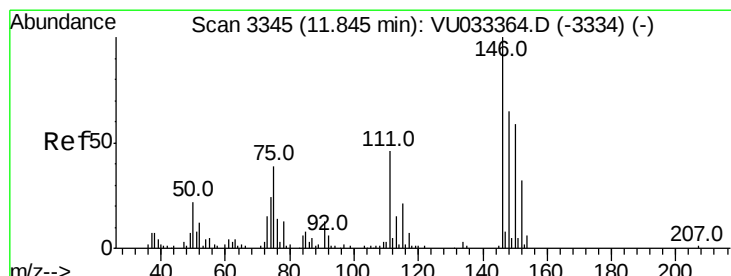


Abundance Ion 172.90 (172.60 to 173.60): V
Ion 174.90 (174.60 to 175.60): V
Ion 253.75 (253.45 to 254.45): V



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#68

1,2-Dichlorobenzene-d4

Concen: 0.914 ug/l

RT: 11.85 min Scan# 3346

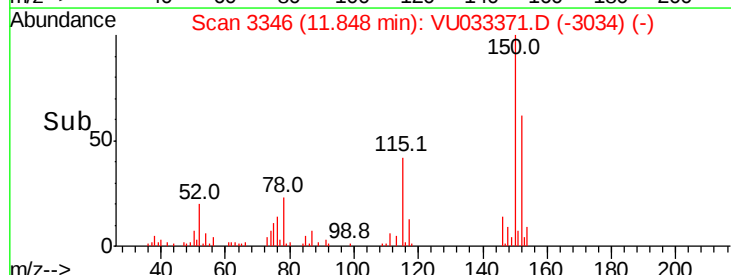
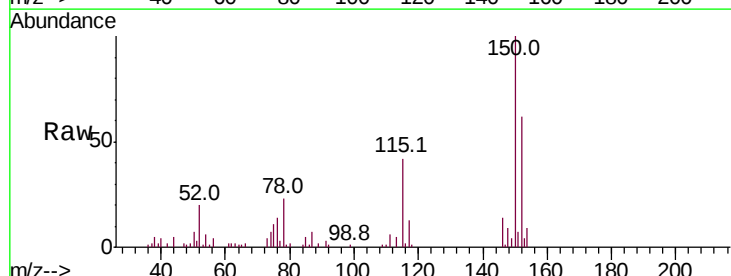
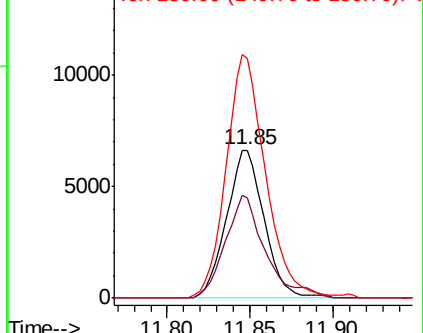
Delta R.T. 0.00 min

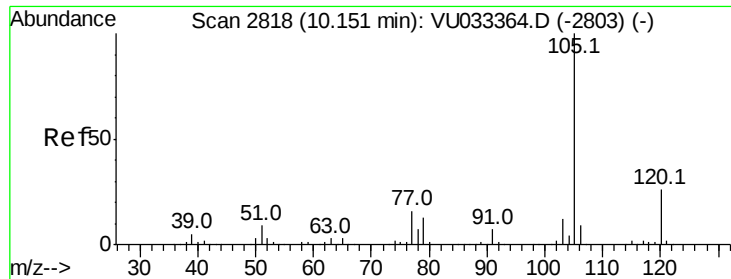
Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Tgt Ion:	152	Resp:	10455
Ion Ratio	Lower	Upper	
152	100		
115	73.5	0.0	123.2
150	172.3	0.0	648.4

Abundance Ion 152.00 (151.70 to 152.70): V
Ion 115.00 (114.70 to 115.70): V
Ion 150.00 (149.70 to 150.70): V





#69

Isopropylbenzene

Concen: 0.409 ug/l

RT: 10.15 min Scan# 2818

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

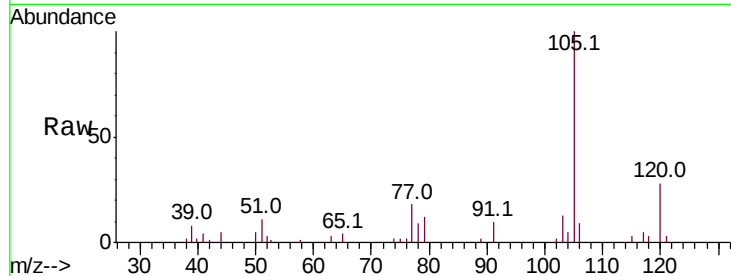
Tot Ion:105 Resp: 14289

Ion Ratio Lower Upper

105 100

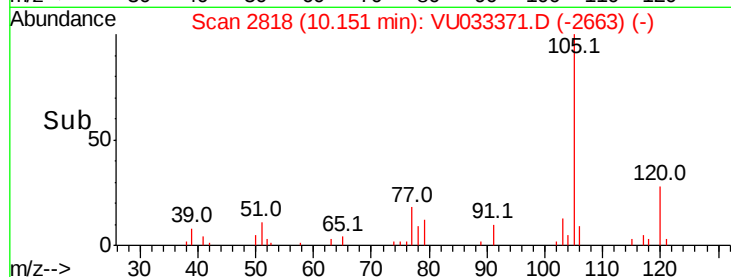
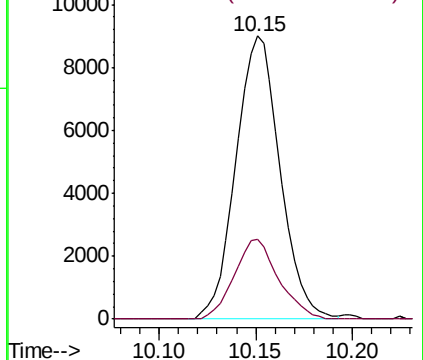
120 28.2 13.4 40.1

Manual Integrations
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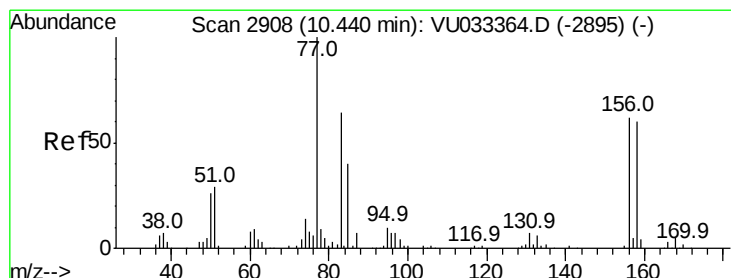
Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



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#70

1,1,2,2-Tetrachloroethane

Concen: 0.461 ug/l

RT: 10.44 min Scan# 2909

Delta R.T. 0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

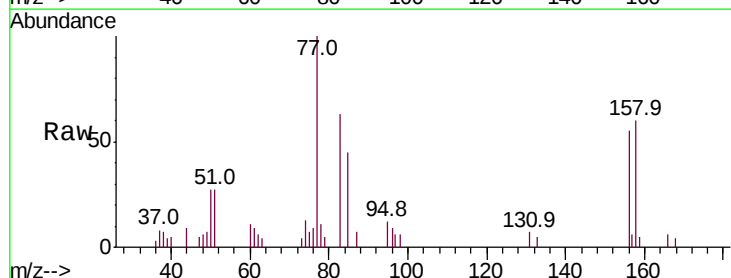
Tgt Ion: 83 Resp: 4204

Ion Ratio Lower Upper

83 100

131 8.0 8.0 12.0#

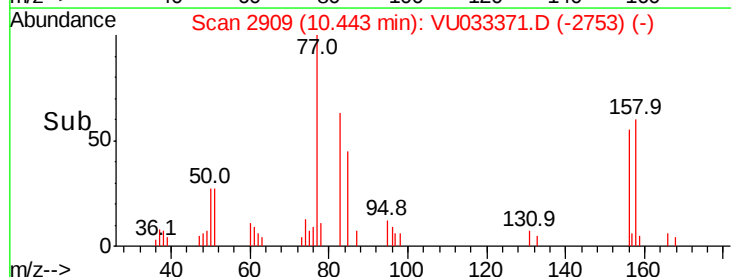
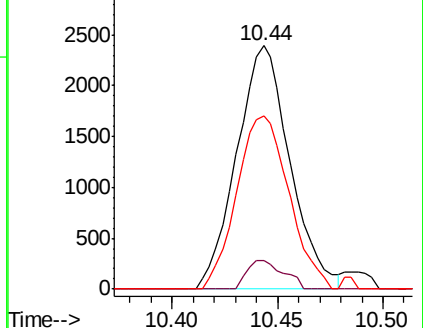
85 69.6 51.8 77.8

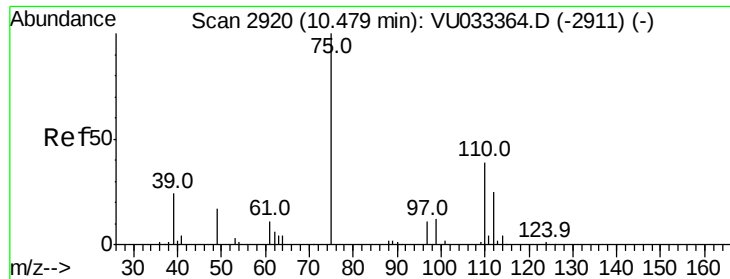


Abundance Ion 83.00 (82.70 to 83.70): VU0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VU0



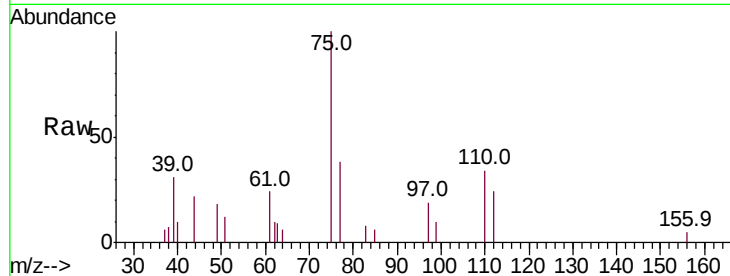


#71
1,2,3-Trichloropropane
Concen: 0.464 ug/l m
RT: 10.48 min Scan# 2921
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

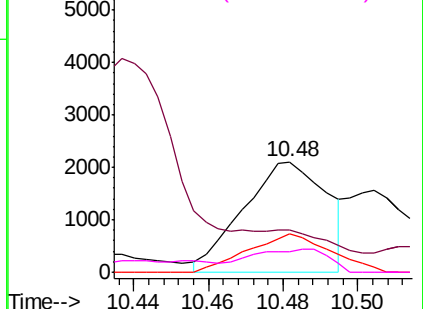
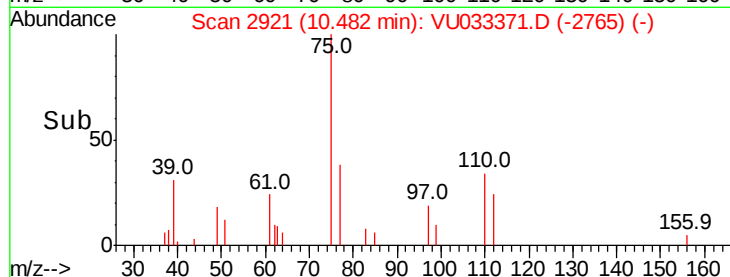
Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
75	100		
77	19.6	0.0	18.2#
110	34.4	0.0	71.4
97	19.7	0.0	37.8

Manual Integrations
APPROVED

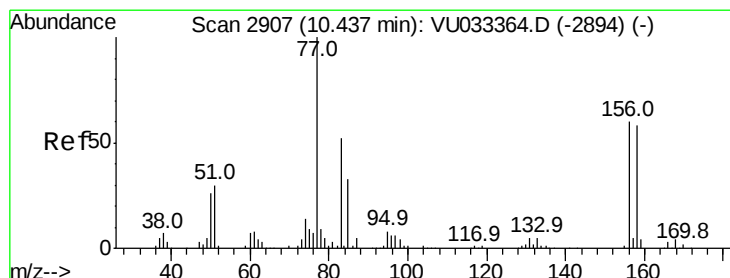


Abundance Ion 75.00 (74.70 to 75.70): VU033371.D (-2765) (-)
Ion 77.00 (76.70 to 77.70): VU033371.D (-2765) (-)
Ion 110.00 (109.70 to 110.70): VU033371.D (-2765) (-)
Ion 97.00 (96.70 to 97.70): VU033371.D (-2765) (-)



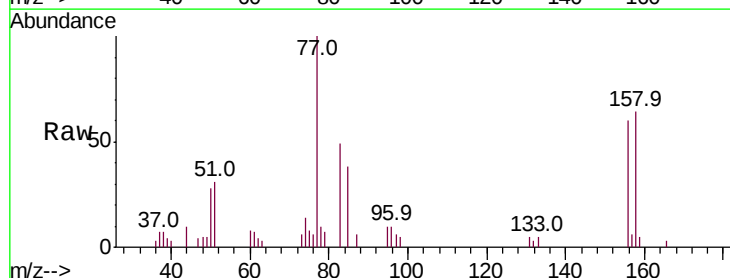
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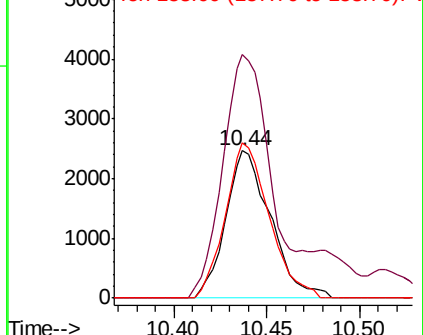
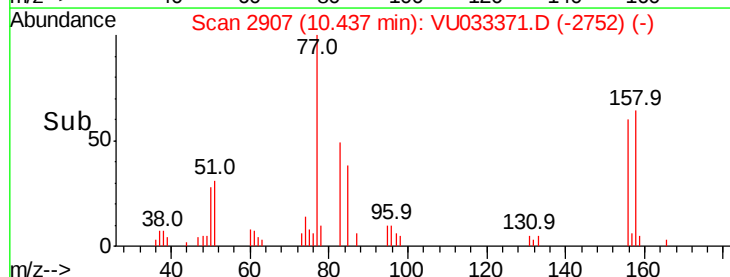


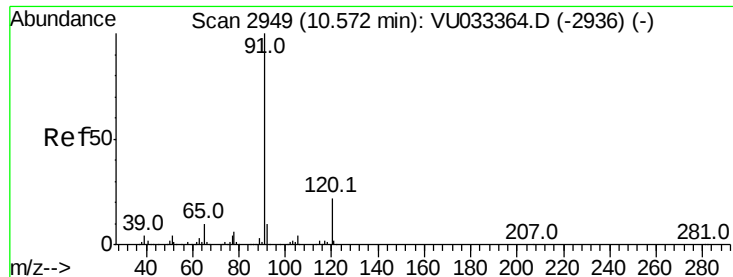
#72
Bromobenzene
Concen: 0.449 ug/l
RT: 10.44 min Scan# 2907
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
156	100		
77	182.2	0.0	324.4
158	102.6	0.0	192.4



Abundance Ion 156.00 (155.70 to 156.70): VU033371.D (-2752) (-)
Ion 77.00 (76.70 to 77.70): VU033371.D (-2752) (-)
Ion 158.00 (157.70 to 158.70): VU033371.D (-2752) (-)





#73

n-propylbenzene

Concen: 0.411 ug/l

RT: 10.57 min Scan# 2949

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

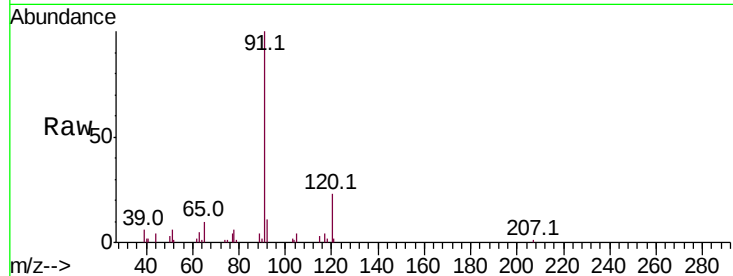
Tot Ion:120 Resp: 4090

Ion Ratio Lower Upper

120 100

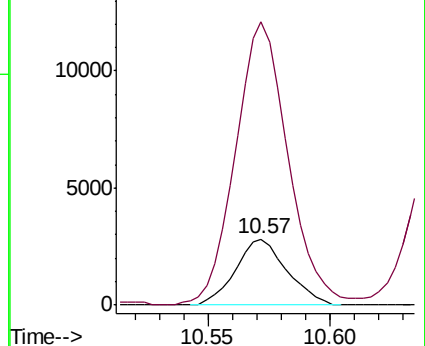
91 443.6 355.1 532.7

Manual Integrations
APPROVED



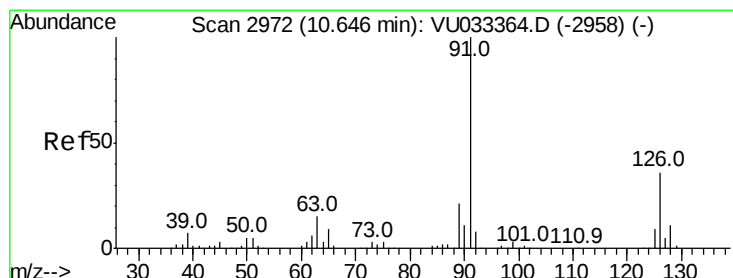
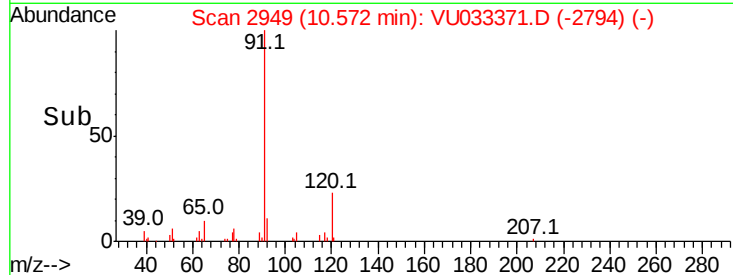
Abundance Ion 120.00 (119.70 to 120.70): V

Ion 91.00 (90.70 to 91.70): VU0



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#74

2-Chlorotoluene

Concen: 0.471 ug/l

RT: 10.64 min Scan# 2971

Delta R.T. -0.00 min

Lab File: VU033371.D

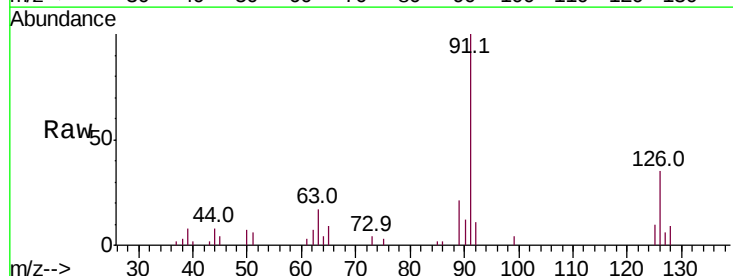
Acq: 23 Jul 2019 10:33

Tgt Ion:126 Resp: 4284

Ion Ratio Lower Upper

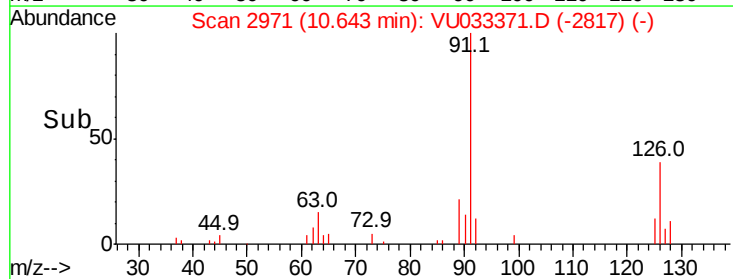
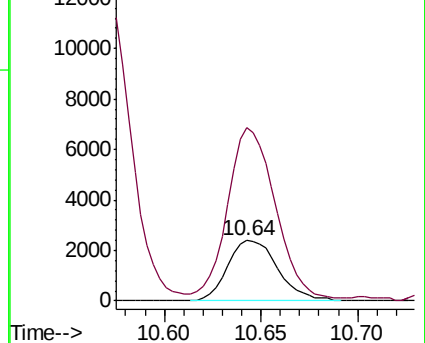
126 100

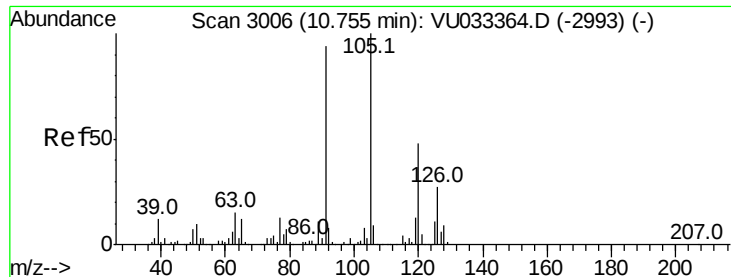
91 269.6 0.0 598.0



Abundance Ion 126.00 (125.70 to 126.70): V

Ion 91.00 (90.70 to 91.70): VU0





#75

1,3,5-Trimethylbenzene

Concen: 0.390 ug/l

RT: 10.76 min Scan# 3006

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

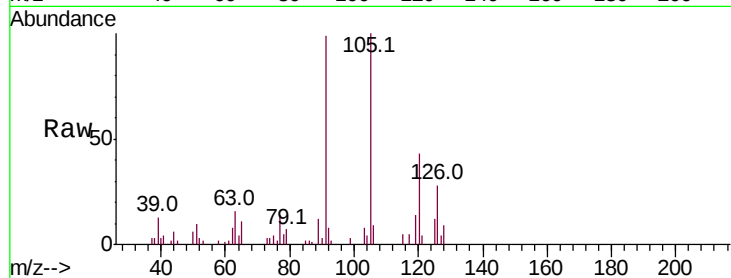
Tot Ion:105 Resp: 12235

Ion Ratio Lower Upper

105 100

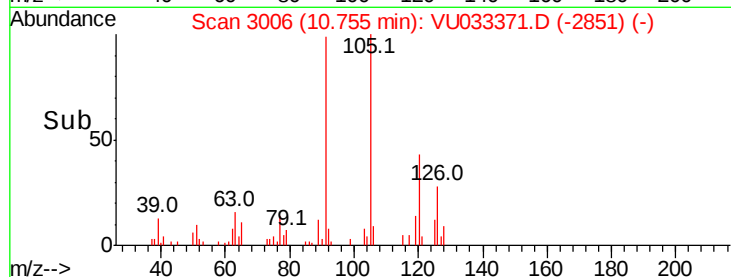
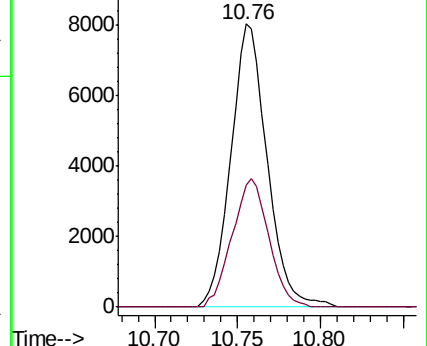
120 45.8 38.2 57.4

Manual Integrations
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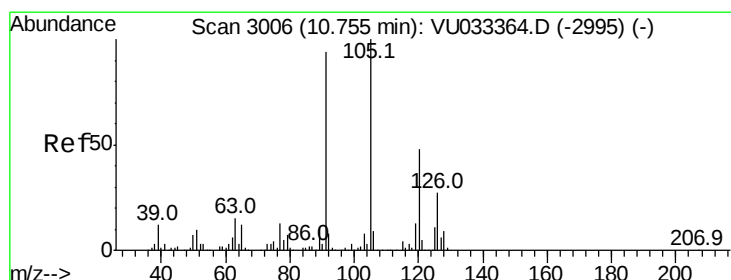
Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



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#76

4-Chlorotoluene

Concen: 0.404 ug/l

RT: 10.76 min Scan# 3007

Delta R.T. 0.00 min

Lab File: VU033371.D

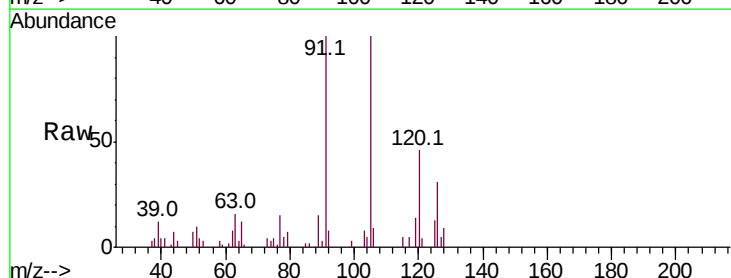
Acq: 23 Jul 2019 10:33

Tgt Ion:126 Resp: 3829

Ion Ratio Lower Upper

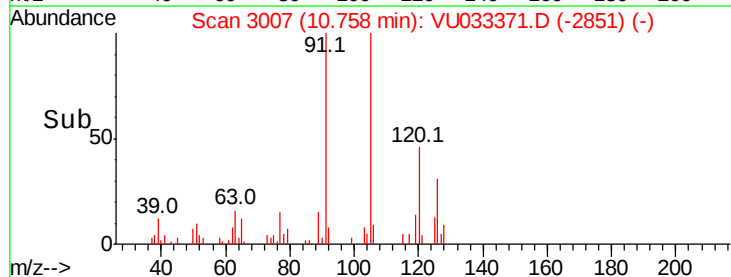
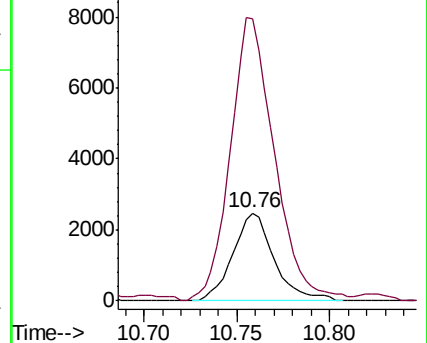
126 100

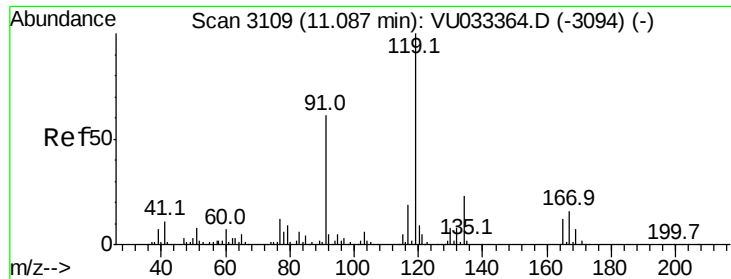
91 345.1 0.0 681.0



Abundance Ion 126.00 (125.70 to 126.70): V

Ion 91.00 (90.70 to 91.70): VU0



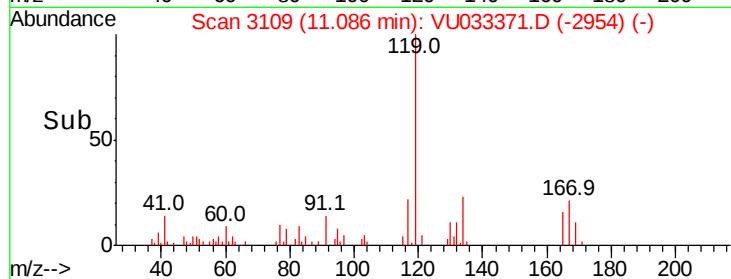
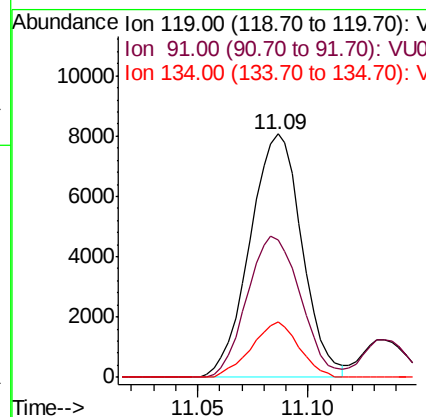
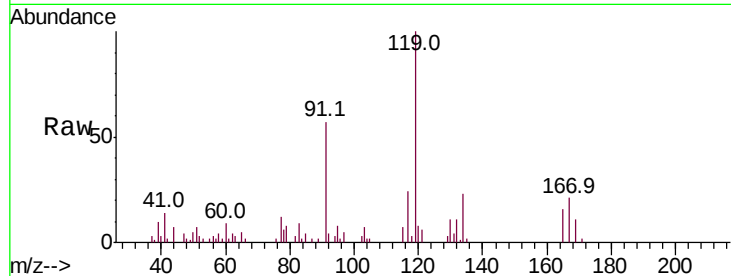


#77
tert-Butylbenzene
Concen: 0.446 ug/l
RT: 11.09 min Scan# 3109
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

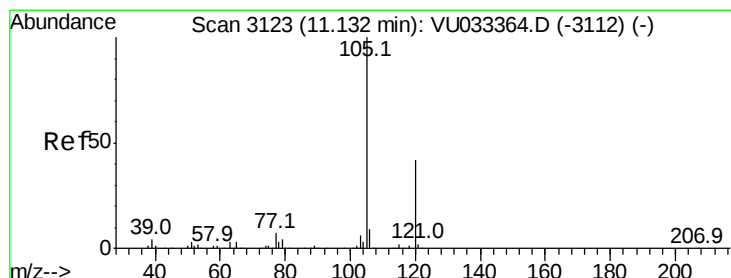
Tot Ion	Ratio	Lower	Upper
119	100		
91	59.5	30.4	91.3
134	20.7	18.5	27.7

Manual Integrations
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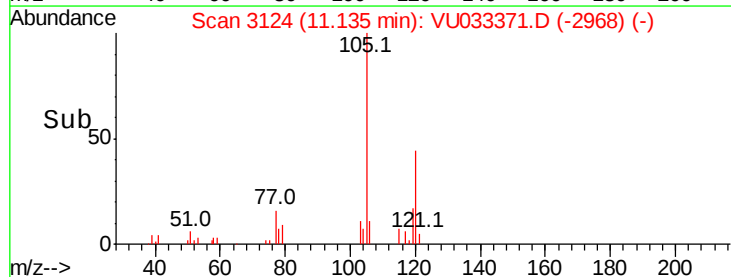
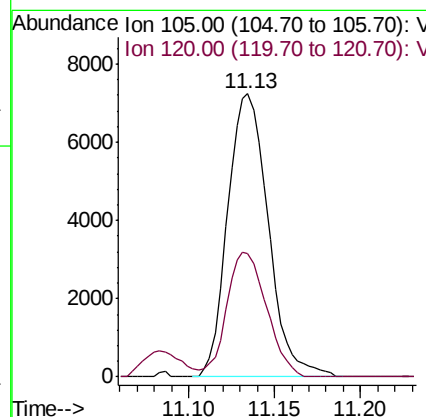
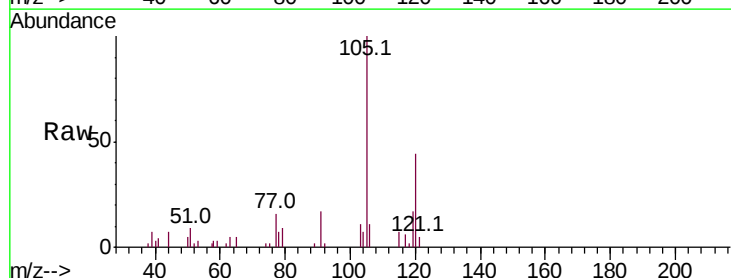
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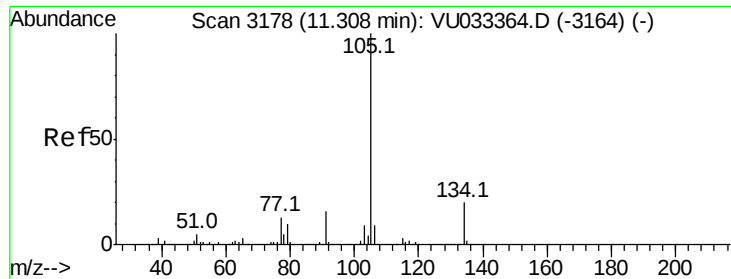
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#78
1,2,4-Trimethylbenzene
Concen: 0.373 ug/l
RT: 11.13 min Scan# 3124
Delta R.T. 0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
105	100		
120	43.3	22.5	67.5



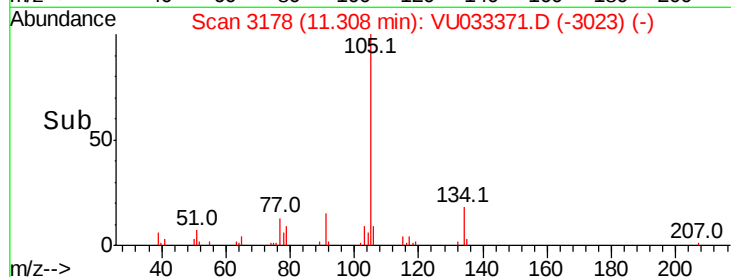
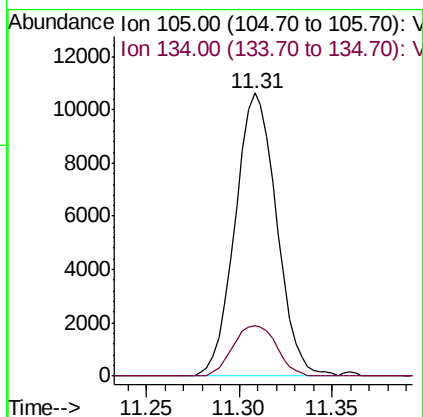
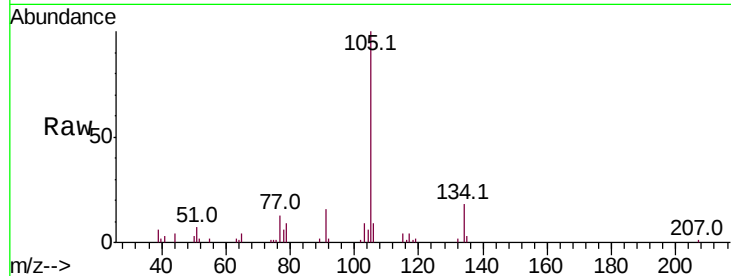


#79
 sec-Butylbenzene
 Concen: 0.404 ug/l
 RT: 11.31 min Scan# 3178
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

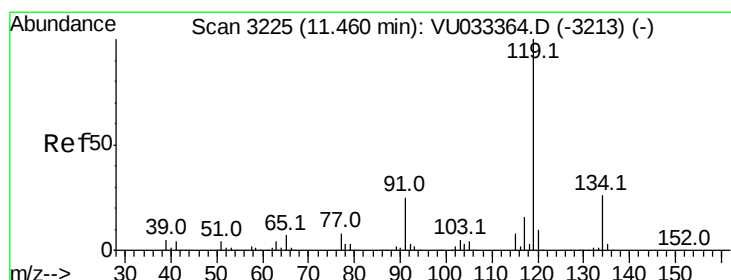
Tot Ion	Ratio	Lower	Upper
105	100		
134	18.8	15.5	23.3

Manual Integrations
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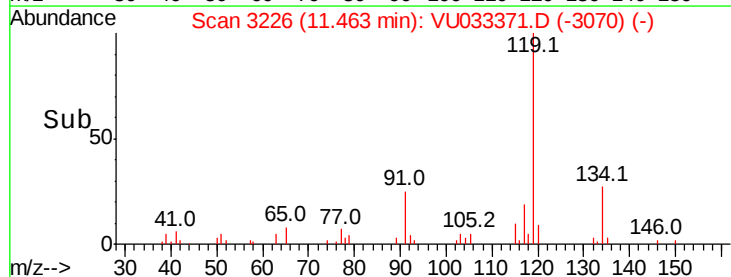
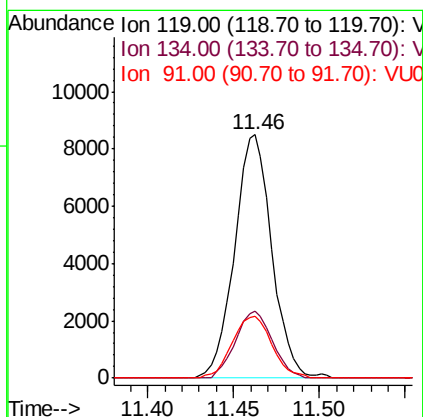
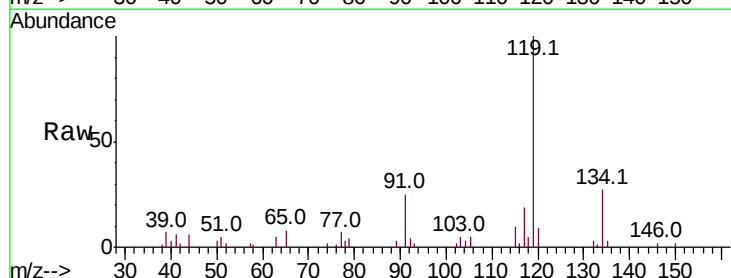
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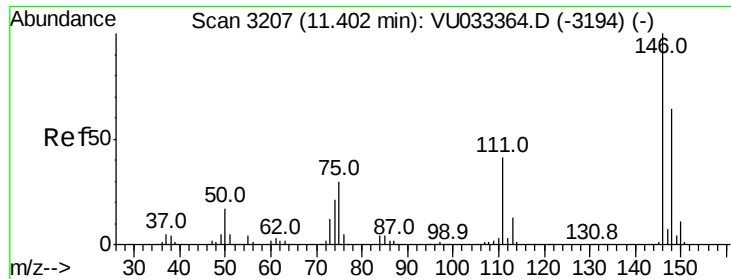
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#81
 p-Isopropyltoluene
 Concen: 0.384 ug/l
 RT: 11.46 min Scan# 3226
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
119	100		
134	27.0	21.0	31.4
91	27.0	19.8	29.6



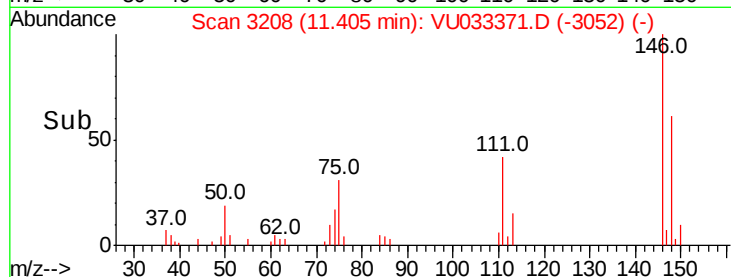
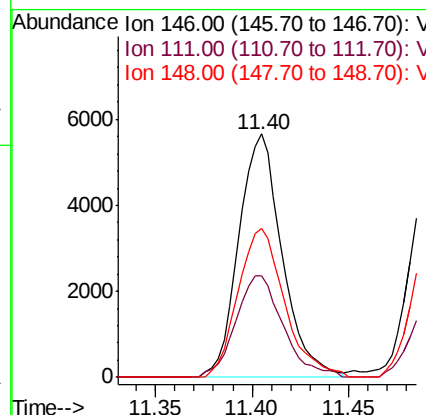
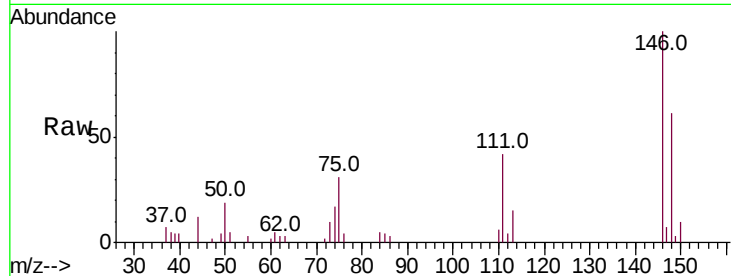


#82
 1,3-Dichlorobenzene
 Concen: 0.449 ug/l
 RT: 11.40 min Scan# 3208
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

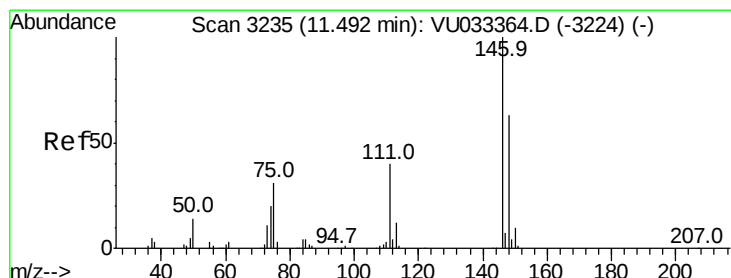
Tot Ion	Ratio	Lower	Upper
146	100		
111	45.5	33.3	49.9
148	65.8	50.8	76.2

Manual Integrations
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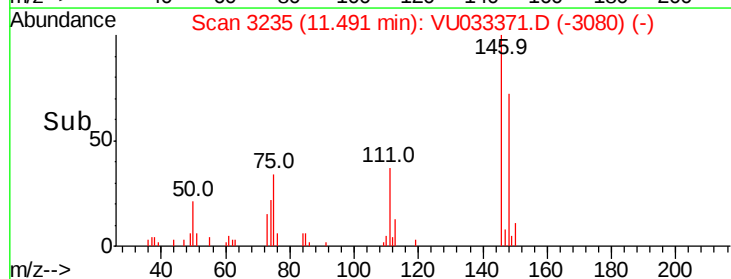
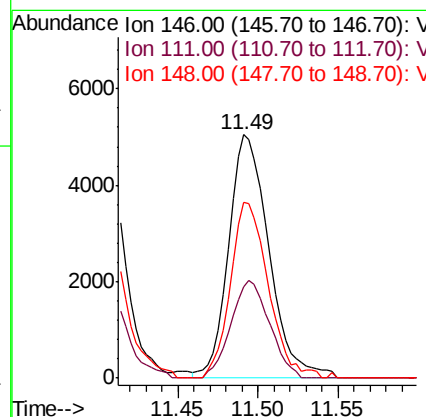
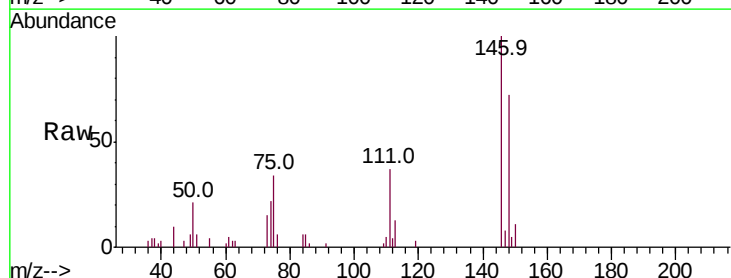
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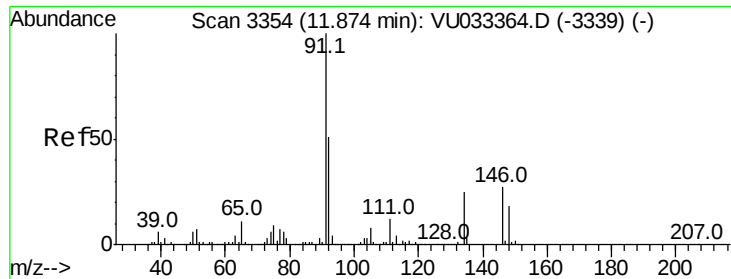
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#83
 1,4-Dichlorobenzene
 Concen: 0.448 ug/l
 RT: 11.49 min Scan# 3235
 Delta R.T. -0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
146	100		
111	38.0	32.2	48.4
148	67.6	51.0	76.4



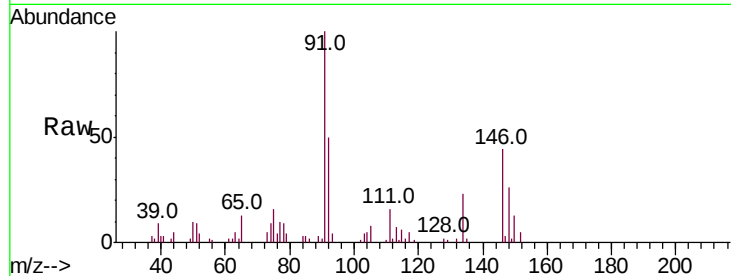


#84
n-Butylbenzene
Concen: 0.392 ug/l
RT: 11.87 min Scan# 3354
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Instrument :
MSVOA_U
ClientSampleId :
LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
91	100		
92	48.4	41.0	61.6
134	22.4	19.5	29.3

Manual Integrations
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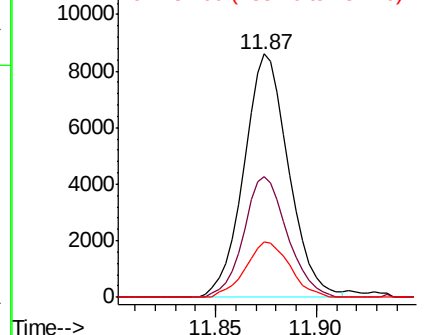


Abundance

Ion 91.00 (90.70 to 91.70): VU033371.D (-3199) (-)

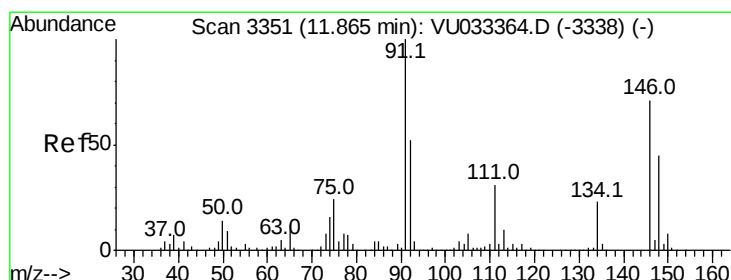
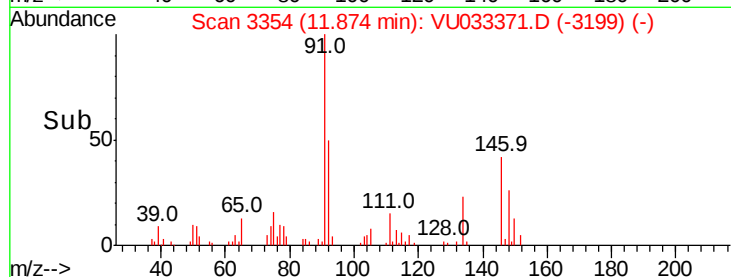
Ion 92.00 (91.70 to 92.70): VU033371.D (-3199) (-)

Ion 134.00 (133.70 to 134.70): VU033371.D (-3199) (-)



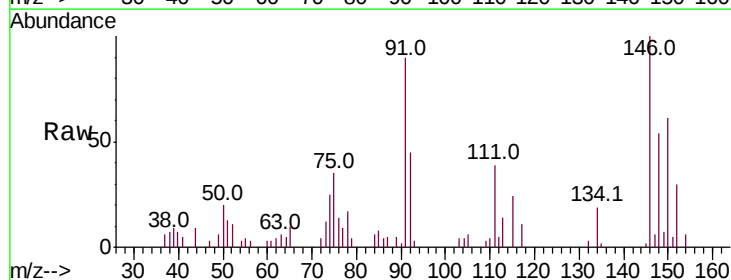
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#85
1,2-Dichlorobenzene
Concen: 0.479 ug/l
RT: 11.86 min Scan# 3351
Delta R.T. -0.00 min
Lab File: VU033371.D
Acq: 23 Jul 2019 10:33

Tgt Ion	Ratio	Lower	Upper
146	100		
111	39.2	21.7	65.1
148	58.7	32.0	96.0

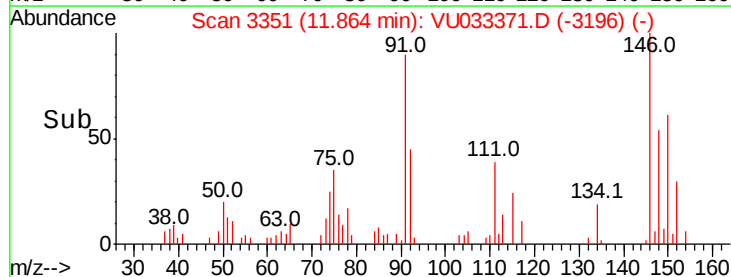
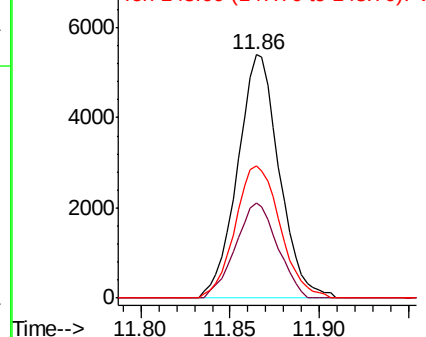


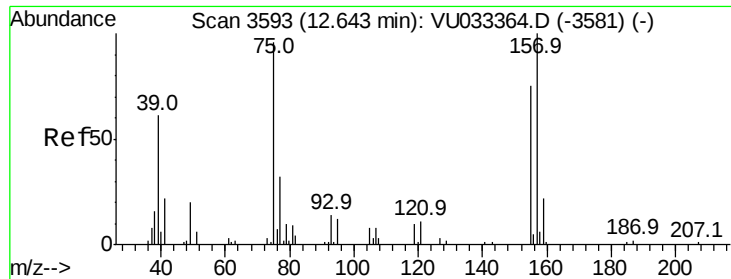
Abundance

Ion 146.00 (145.70 to 146.70): VU033371.D (-3196) (-)

Ion 111.00 (110.70 to 111.70): VU033371.D (-3196) (-)

Ion 148.00 (147.70 to 148.70): VU033371.D (-3196) (-)



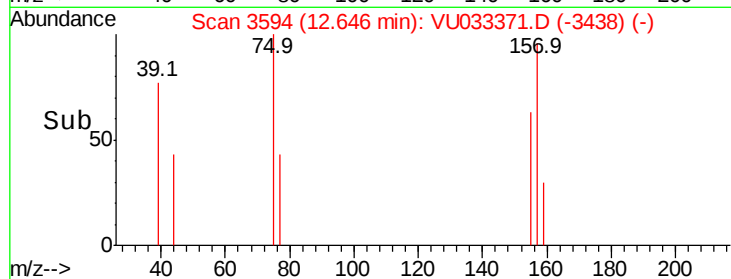
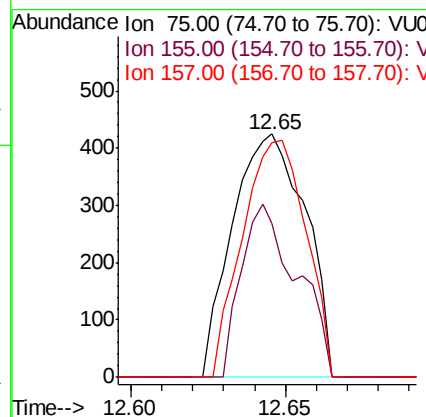
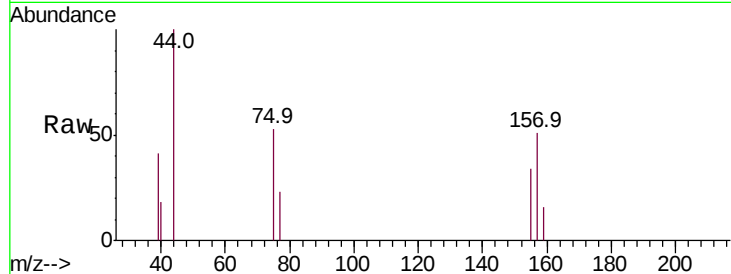


#86
 1,2-Dibromo-3-Chloropropane
 Concen: 0.484 ug/l
 RT: 12.65 min Scan# 3594
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

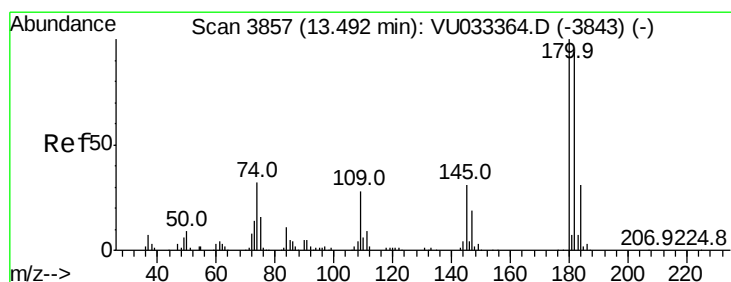
Tot Ion: 75 Resp: 695
 Ion Ratio Lower Upper
 75 100
 155 54.5 63.3 94.9#
 157 84.9 82.5 123.7

Manual Integrations
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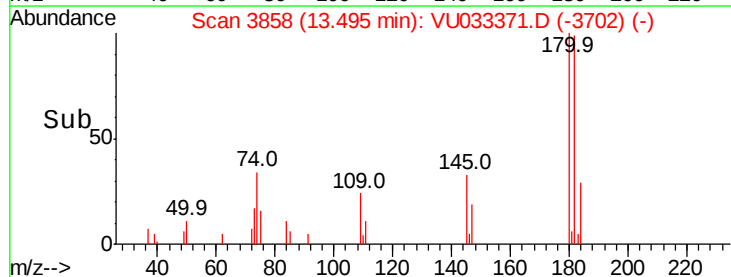
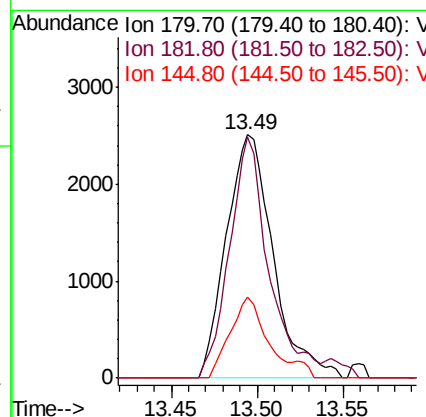
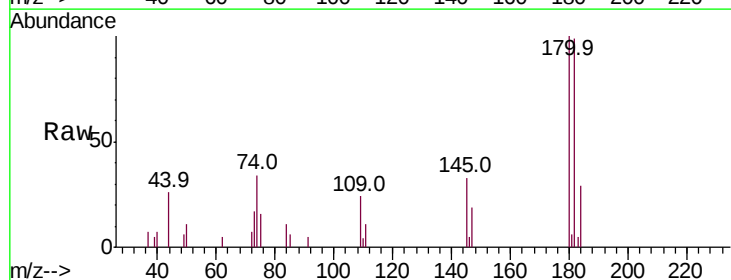
MMDadoda

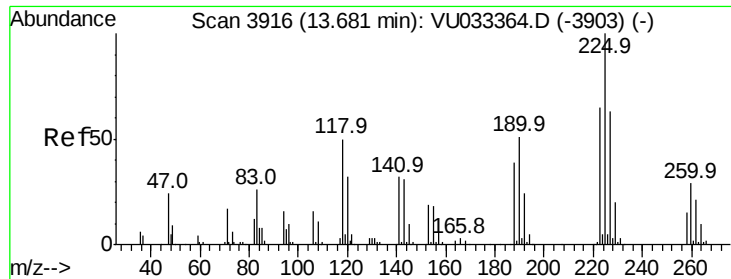
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#87
 1,2,4-Trichlorobenzene
 Concen: 0.436 ug/l
 RT: 13.49 min Scan# 3858
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

Tgt Ion: 180 Resp: 4773
 Ion Ratio Lower Upper
 180 100
 182 83.3 76.2 114.4
 145 27.7 25.0 37.4





#88

Hexachlorobutadiene

Concen: 0.502 ug/l

RT: 13.68 min Scan# 3915

Delta R.T. -0.00 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

Instrument :

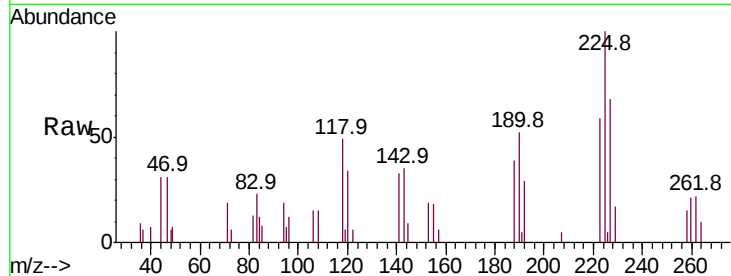
MSVOA_U

ClientSampleId :

LOQ-WATER-02-QT3-2019

Tot Ion:	225	Resp:	3392
Ion Ratio	Lower	Upper	
225	100		
223	56.7	52.2	78.4
227	64.9	51.7	77.5

Manual Integrations
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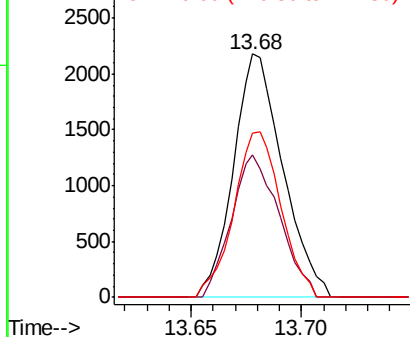


Abundance

Ion 224.60 (224.30 to 225.30): V

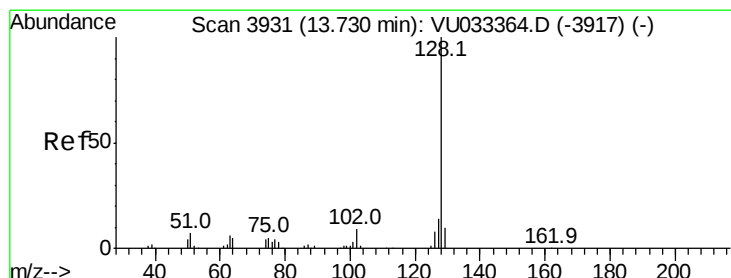
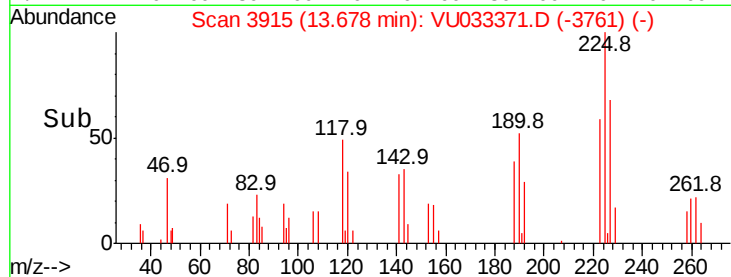
Ion 222.60 (222.30 to 223.30): V

Ion 226.60 (226.30 to 227.30): V



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#89

Naphthalene

Concen: 0.336 ug/l

RT: 13.74 min Scan# 3933

Delta R.T. 0.01 min

Lab File: VU033371.D

Acq: 23 Jul 2019 10:33

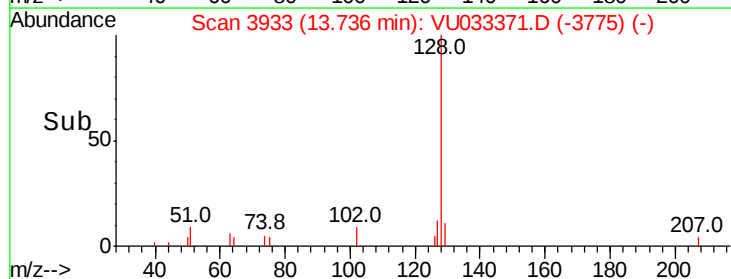
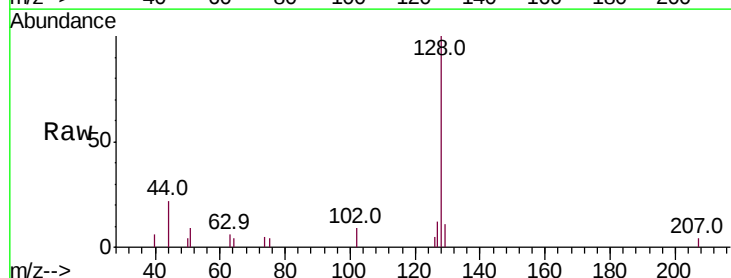
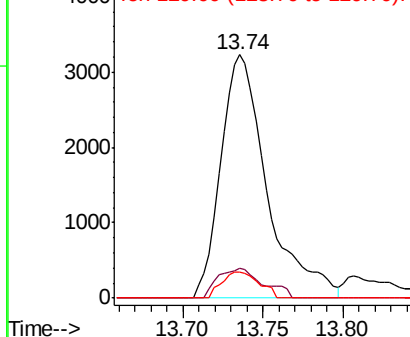
Tgt Ion:	128	Resp:	6411
Ion Ratio	Lower	Upper	
128	100		
127	11.9	10.8	16.2
129	8.5	8.5	12.7

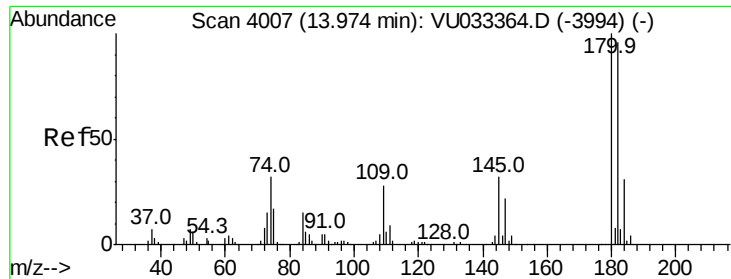
Abundance

Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



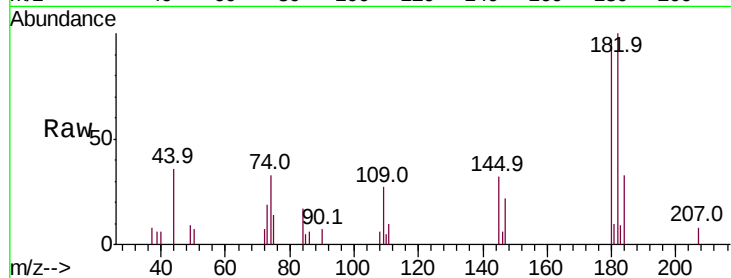


#90
 1,2,3-Trichlorobenzene
 Concen: 0.415 ug/l
 RT: 13.98 min Scan# 4008
 Delta R.T. 0.00 min
 Lab File: VU033371.D
 Acq: 23 Jul 2019 10:33

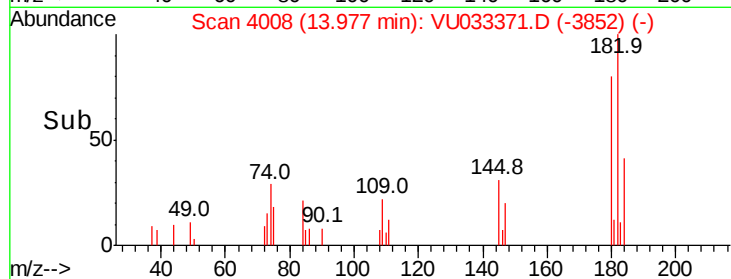
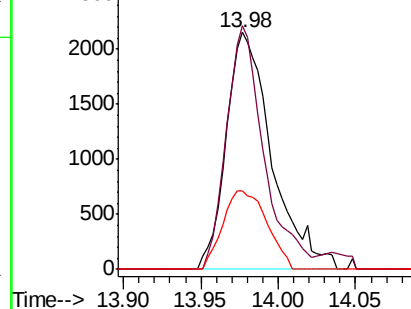
Instrument :
 MSVOA_U
 ClientSampleId :
 LOQ-WATER-02-QT3-2019

Tot Ion	Ratio	Lower	Upper
180	100		
182	84.4	77.9	116.9
145	32.1	25.8	38.8

Manual Integrations
 APPROVED



Abundance Ion 179.70 (179.40 to 180.40): V
 Ion 181.70 (181.40 to 182.40): V
 Ion 144.80 (144.50 to 145.50): V



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7/25/2019 11:15:32 AM