

Removal Rates for Cyanotoxin, Specifically Planktothrix sp.

Using
Powell Water Electrocoagulation

Reported in ug/l

All Amperage Readings were at 100 volts

MT 16122 – MT 16125 – Dilution w/DI Water

MT 16126 - MT16131 – Dilution w/ Tap Water

Sample ID	Description	Amperage	Raw/Dilution Rate	Start	Post EC + 11 Micron Filter	% Reduction
MT 16121	Lagoon Grab Sample		No Dilution	67.1		
MT 16122	EC w/60 sec. residence	~1.0	No Dilution	67.1	2.2	96.76
MT 16123	EC w/15 sec. residence	~1.0	No Dilution	67.1	2.5	96.31
MT 16124	EC w/60 sec. residence	~0.25	4:1	16.7	0.126	99+
MT 16125	EC w/15 sec. residence	~0.25	4:1	16.7	0.164	98.8
MT 16126	EC w/60 sec. residence	Split Chamber 4	50:1	1.34	0.000	99+
MT 16127	EC w/15 sec. residence	Split Chamber 4	50:1	1.34	0.006	99+
MT16128	EC w/60 sec. residence	Split Chamber 3.75	200:1	0.34	0.000	99+
MT16129	EC w/15 sec. residence	Split Chamber 3.75	200:1	0.34	0.000	99+
MT16130	EC w/60 sec. residence	Split Chamber 3.75	400:1	0.16	0.000	99+
MT16131	EC w/15 sec. residence	Split Chamber 3.75	400:1	0.16	0.001	99+



Drinking Water Source

Mono Species of Planktothrix (Neurotoxic Species)



Drinking Water Lab



Raw Water – Start 67.1 ug/l

EC Treated w/ 15 second Residence Time