Toxicity Testing

Toxicity testing was initiated on 23 May 2010 for water samples collected on the same date. The identifier for each sample collected, along with its corresponding depth can be found in Table 1.

Table 1. Water Samples Collected for Toxicity Testing

Date	Sample Number	Depth (m)
23 May 2010	420104-01	1250
23 May 2010	420105-01	1200
23 May 2010	420106-01	1050
23 May 2010	420108-01	600
23 May 2010	420112-01	0
24 May 2010	460102-01	1400
24 May 2010	460103-01	1228
24 May 2010	460105-01	1100
24 May 2010	460108-01	500
24 May 2010	460112-01	0
24 May 2010	480103-01	1284
24 May 2010	480107-01	1100
24 May 2010	480108-01	500
24 May 2010	480112-01	0

Each water sample was serially diluted for toxicity testing into the concentrations found in Table 2.

Table 2. Serial Dilution Concentrations of Water Sample Tested

Concentration Number	Percent (%) Dilution
Control	0
Concentration 5	6.25
Concentration 4	12.50
Concentration 3	25.00
Concentration 2	50.00
Concentration 1	100.00

Rotifers were added to the varying concentrations for each water sample. After a 24-hour incubation period, the number of dead rotifers were tallied. The percent (%) mortality is calculated for each serial dilution. The results from the Rototox M Kit can be found in Table 3. The total mortality number is cumulative over six wells (reps) of 5 rotifers per well. The sample numbers as well as depth of sampling are also listed in Table 3. Due to the low mortality numbers for each toxicant sample tested,
No calculations of LC50s have been possible.

Table 3. Organism Mortality for Toxicant Concentration = 100%

Sample ID	Depth (m)	# Dead Organisms	% Mortality
420104	1250	4	13.33
420105	1200	1	3.33
420106	1050	1	3.33
420108	600	4	13.33
420112	0	3	10.00
460102	1400		
460103	1228		
460105	1100		
460108	500		
460112	0		
480103	1284		
480107	1100		
480108	500		
480112	0		