

Reviewed By : _____

96hr *Rainbow Trout* Bioassay Report

Test Information :

Type of Bioassay :	96 Hour Multiple Dilution Static Bioassay		
Test Species :	<i>Oncorhynchus mykiss</i>	(Rainbow Trout)	
Test Protocol :	Environment Canada EPS 1/RM/13 (Dec.2000 ed.)		
Source of Test Species :	Aikenberry Trout Farm		
Culture Lot # :	AB1017-3		
Mean (± 1 SD) & Range Fork Length of Fish :	3.6 \pm 0.1 cm	3.5 - 3.8	n= 10
Mean (± 1 SD) & Range Weight of Fish :	0.61 \pm 0.05 g	0.52 - 0.71	
Cummulative Mortality of Fish Lot in the 7 Days Prior to Test :	0.8%		
Source of Holding Water :	Ammonia Free, Dechlorinated City of Edmonton Tap Water		
Size of Test Container :	38 L		
Material of Test Container :	Disposable Plastic Liner in Glass Tank		
Volume of Test Solution in Each Test Vessel :	20 L		
Depth of Test Material in Each Test Vessel :	≥ 15 cm		
Concentrations of Test Material :	0, 625, 1250, 2500, 5000, 7500ppm		
Number of Fish per Test Vessel :	10		
Loading Density :	0.31 g/L		
Method of Aeration :	Carbon Filtered, Compressed Air Through Air-stone		
Aeration Rate during test :	6.5 \pm 1.0 mL/min./L		

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Setup	Sample Properties Prior To Initial Setup:	Temperature °C	pH @ 20°C	EC µS cm-1	Dissolved Oxygen mg/L
		n/a	n/a	n/a	n/a
Analyst: HW	Preaeration Time (at rate of 6.5 ± 1.0 mL / min / L) :	30 min			

Time	Description	Concentration (parts per million or mg/L)					
		0	625	1250	2500	5000	7500

Start	Temperature (°C)	14.9	14.3	14.1	14.1	14.4	14.5
	pH	7.6	7.0	6.5	5.7	4.6	4.0
	EC (µS cm-1)	327	355	383	450	654	866
	Dissolved Oxygen (mg/L)	10.0	10.2	10.3	10.5	10.4	10.3
Analyst: HW	Number Dead						
	Atypical/Stressed Behaviour						
1/4 Hour	Number Dead						
	Atypical/Stressed Behaviour						
Analyst:	Number Dead						
	Atypical/Stressed Behaviour						
1/2 Hour	Number Dead						
	Atypical/Stressed Behaviour						
Analyst:	Number Dead						
	Atypical/Stressed Behaviour						
1 Hour	Number Dead						
	Atypical/Stressed Behaviour						
Analyst:	Number Dead						
	Atypical/Stressed Behaviour						
2 Hours	Number Dead						
	Atypical/Stressed Behaviour						
Analyst:	Number Dead						
	Atypical/Stressed Behaviour						
4 Hours	Number Dead						
	Atypical/Stressed Behaviour						
Analyst:	Number Dead						
	Atypical/Stressed Behaviour						
24 Hours	Temperature (°C)	14.7	14.5	14.4	14.2	14.2	n/a
	pH	8.0	7.0	6.4	5.6	4.6	n/a
	EC (µS cm-1)	331	360	395	471	684	n/a
	Dissolved Oxygen (mg/L)	9.8	10.0	10.1	10.2	10.2	n/a
	Number Dead	0	0	0	2	10	10
	Atypical/Stressed Behaviour	0	0	0	4L	n/a	n/a
Analyst: HW	Number Dead						
	Atypical/Stressed Behaviour						
48 Hours	Temperature (°C)	14.8	15.0	15.1	15.0	14.6	n/a
	pH	8.0	7.8	7.7	6.4	4.6	n/a
	EC (µS cm-1)	328	364	388	463	695	n/a
	Dissolved Oxygen (mg/L)	9.8	9.7	9.7	9.8	9.8	n/a
	Number Dead	0	0	0	3	10	10
	Atypical/Stressed Behaviour	0	0	0	0	n/a	n/a
Analyst: JL	Number Dead						
	Atypical/Stressed Behaviour						
72 Hours	Temperature (°C)	15.1	15.2	15.2	15.1	15.1	n/a
	pH	8.1	7.7	7.5	6.5	4.6	n/a
	EC (µS cm-1)	332	366	390	465	697	n/a
	Dissolved Oxygen (mg/L)	9.4	9.1	8.4	9.4	9.8	n/a
	Number Dead	0	0	0	3	10	10
	Atypical/Stressed Behaviour	0	0	0	0	n/a	n/a
Analyst: AD	Number Dead						
	Atypical/Stressed Behaviour						
96 Hours	Temperature (°C)	15.3	15.0	15.1	15.0	15.1	n/a
	pH	8.0	7.9	7.9	6.9	4.7	n/a
	EC (µS cm-1)	410	451	469	499	682	n/a
	Dissolved Oxygen (mg/L)	7.7	8.6	9.0	9.3	9.4	n/a
	Number Dead	0	0	0	3	10	10
	Atypical/Stressed Behaviour	0	0	0	0	n/a	n/a
Analyst: JL	Number Dead						
	Atypical/Stressed Behaviour						

Stress Codes: P: dark pigmentation U: light pigmentation L: lethargic H: hyperactive M: inhibited movement G: pronounced opercular movement S: extreme toxic shock D: disorientated