

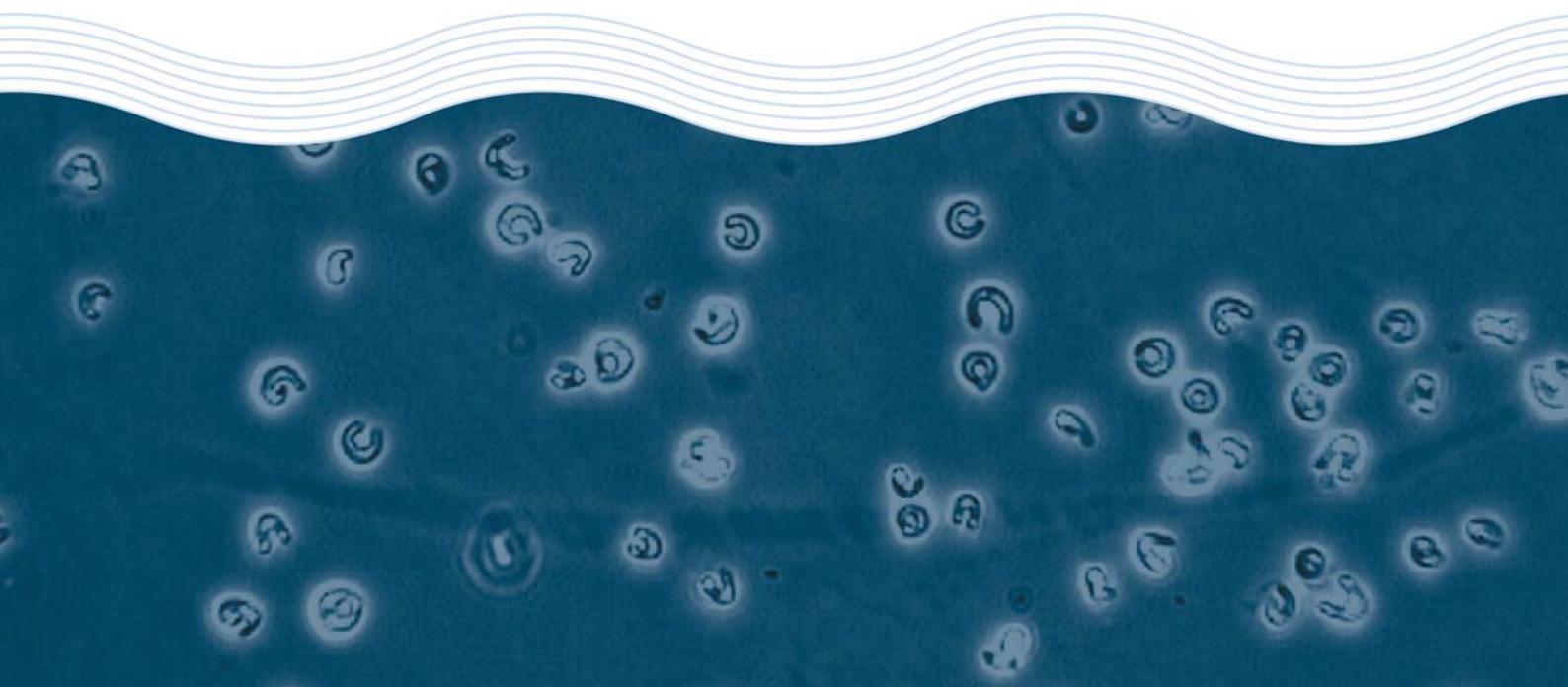


Toxicity Assessment of Slickgone EW Dispersant

Spilltech Pty Ltd

Test Report

December 2009





Toxicity Assessment of Slickgone EW Dispersant

Spilltech Pty Ltd

Test Report

December 2009

Toxicity Test Report: TR0529/1

(page 1 of 2)

This document is issued in accordance with NATA's accreditation requirements

Client:	Spill Tech Pty Ltd PO Box 1451 Noosaville BC QLD 4566	ESA Job #:	PR0529
Attention:	John Eddy	Date Sampled:	Not Supplied
Client Ref:	Not Supplied	Date Received:	16 October 2009
		Sampled By:	Client
		ESA Quote #:	PL0529_q01

Lab ID No.:	Sample Name:	Sample Description:
3808	Slickgone EW	Chemical product. Sample received at room temperature in apparent good condition.

Test Performed:	72-hr Sea urchin larval development test using <i>Heliocidaris tuberculata</i>
Test Protocol:	ESA SOP 105 (ESA 2009), based on APHA (1998), Simon and Luginestra (1996) and Doyle <i>et al.</i> (2003)
Deviations from Protocol:	Nil
Comments on Solution Preparation:	The highest test concentration of 1830.4mg/L Slickgone EW was prepared by diluting 1830.4mg of Slickgone EW to 1L with filtered seawater (FSW). The 1830.4mg/L solution was serially diluted with FSW to achieve the remaining test concentrations.
Source of Test Organisms:	Field collected from Maroubra, NSW
Test Initiated:	9 December 2009 at 1615h

Concentration (mg/L)	% Normal larvae (Mean ± SD)	Vacant	Vacant
FSW control	91.8 ± 1.7		
27.5	92.8 ± 2.2		
54.9	90.8 ± 1.7		
118.0	33.0 ± 7.8 *		
228.8	0.0 ± 0.0		
457.6	0.0 ± 0.0		
915.2	0.0 ± 0.0		
1830.4	0.0 ± 0.0		
72 hr IC10 = 73.2 (64.1-73.2)mg/L			
72 hr EC50 = 100.7 (100.7-109.8)mg/L			
NOEC= 54.9mg/L			
LOEC= 119.0mg/L			

*Significantly lower percentage of normally developed larvae compared with the FSW Control (Dunnett's Test, 1-tailed, P=0.05)

QA/QC Parameter	Criterion	This Test	Criterion met?
Control mean % normal larvae	>70.0%	91.8%	Yes
Reference Toxicant within cusum chart limits	7.1-13.0µg Cu/L	9.4µg Cu/L	Yes

Toxicity Test Report: TR0529/1

(page 2 of 2)



Test Report Authorised by:

Dr Rick Krassoi, Director on 17 December 2009

Results are based on the samples in the condition as received by ESA

NATA Accredited Laboratory Number: 14709

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Citations:

APHA (1998) Method 8810 D. Echinoderm Embryo Development Test. In Standard Methods for the Examination of Water and Wastewater, 20th Ed. American Public Health Association, American Water Works Association and the Water Environment Federation, USA.

Doyle, C.J., Pablo, F., Lim, R.P. and Hyne, R.V. (2003) Assessment of metal toxicity in sediment pore water from Lake Macquarie, Australia. *Arch. Environ. Contam. Toxicology*, 44(3): 343-350.

ESA (2009) *ESA SOP 105 - Sea Urchin Larval Development Test*. Issue No. 8. Ecotox Services Australasia, Sydney NSW.

Simon, J. and Laginestra, E.(1997) Bioassay for testing sublethal toxicity in effluents, using gametes of sea urchin *Heliocidaris tuberculata*. National Pulp Mills Research Program Technical Report No. 20. CSIRO, Canberra, ACT.

Toxicity Test Report: TR0529/2

(page 1 of 2)

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Client:	Spill Tech Pty Ltd PO Box 1451 Noosaville BC QLD 4566	ESA Job #:	PR0529
Attention:	John Eddy	Date Sampled:	Not Supplied
Client Ref:	Not Supplied	Date Received:	16 October 2009
		Sampled By:	Client
		ESA Quote #:	PL0529_q01

Lab ID No.:	Sample Name:	Sample Description:
3808	Slickgone EW	Chemical product. Sample received at room temperature in apparent good condition.

Test Performed:	48-hr larval development test using the rock oyster <i>Saccostrea commercialis</i>
Test Protocol:	ESA SOP 106 (ESA 2009), based on APHA (1998) and Krassoi (1995)
Deviations from Protocol:	Nil
Comments on Solution Preparation:	The highest test concentration of 1830.4mg/L Slickgone EW was prepared by diluting 1830.4mg of Slickgone EW to 1L with filtered seawater (FSW). The 1830.4mg/L solution was serially diluted with FSW to achieve the remaining test concentrations.
Source of Test Organisms:	Farm-reared, Wallis Lakes, NSW.
Test Initiated:	3 November 2009 at 2000h

Sample 3808: Slickgone EW	% Alive/Normal (Mean ± SD)	Vacant	Vacant
FSW control	78.3 ± 5.8		
54.9	78.3 ± 4.5		
119.0	71.7 ± 4.5		
228.8	79.0 ± 8.6		
457.6	75.7 ± 4.0		
915.2	75.7 ± 1.3		
1830.4	17.8 ± 7.3 *		
48-hr IC10 = 1006.7 (0.0-1006.7)mg/L			
48-hr EC50 = 1372.8 (1372.8-1464.3)mg/L			
NOEC = 915.2mg/L			
LOEC = 1830.4mg/L			

*Significantly lower percentage of normal surviving larvae compared with the FSW Control (Dunnett's Test, 1-tailed, P=0.05)

QA/QC Parameter	Criterion	This Test	Criterion met?
FSW Control mean % survival	>70%	88.8%	Yes
FSW Control mean % normal	>70%	88.3%	Yes
Reference Toxicant within cusum chart limits	18.6-27.4µg Cu/L	22.8µg Cu/L	Yes



Toxicity Test Report: TR0529/2

(page 2 of 2)

Test Report Authorised by:

Dr Rick Krassoi, Director on 17 December 2009

Results are based on the samples in the condition as received by ESA

NATA Accredited Laboratory Number: 14709

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Citations:

APHA (1998) Standard Methods for the Examination of Water and Wastewater. 20th Ed. American Public Health Association, American Water Works Association and the Water Environment Federation, Washington, DC.

ESA (2009) SOP 106 – *Bivalve Larval Development Test*. Issue No. 7. Ecotox Services Australasia, Sydney, NSW.

Krassoi, R (1995) Salinity adjustment of effluents for use with marine bioassays: effects on the larvae of the doughboy scallop *Chlamys asperrimus* and the Sydney rock oyster *Saccostrea commercialis*. *Australasian Journal of Ecotoxicology*, 1: 143-148.

Toxicity Test Report: TR0529/3

(page 1 of 2)

Client:	Spill Tech Pty Ltd PO Box 1451 Noosaville BC QLD 4566	ESA Job #:	PR0529
Attention:	John Eddy	Date Sampled:	Not Supplied
Client Ref:	Not Supplied	Date Received:	16 October 2009

Lab ID No.:	Sample Name:	Sample Description:
3808	Slickgone EW	Chemical product. Sample received at room temperature in apparent good condition.

Test Performed:	96-hr fish imbalance test using <i>Lates calcarifer</i>
Test Protocol:	ESA SOP 117 (ESA 2009), based on USEPA (2002)
Deviations from Protocol:	Nil
Comments on Solution Preparation:	The highest test concentration of 9152.0mg/L Slickgone EW was prepared by diluting 18304.0mg of Slickgone EW to 2L with filtered seawater (FSW). The 9152.0mg/L solution was serially diluted with FSW to achieve the remaining test concentrations.
Source of Test Organisms:	West Beach Aquaculture, SA
Test Initiated:	11 November 2009 at 1430h

Sample 3808: Slickgone EW	Concentration (mg/L)	% un-affected (Mean ± SD)	Vacant	Vacant
FSW control	100	± 0.0		
274.6	100	± 0.0		
549.1	100	± 0.0		
1189.8	80.0	± 40.0		
2288.0	35.0	± 41.2 *		
4576.0	10.0	± 20.0 *		
9152.0	10.3	± 19.2 *		
96-hr EC10 = 732.2 (457.6-1098.2)mg/L				
96-hr EC50 = 2288.0 (1738.9-2928.6)mg/L				
NOEC = 1189.8mg/L				
LOEC = 2288.0mg/L				

*Significantly lower percentage of un-affected fish compared with the FSW Control (Steel's Many-One Rank Test, 1-tailed, P=0.05)

QA/QC Parameter	Criterion	This Test	Criterion met?
Control mean % un-affected	>90.0%	100.0%	Yes
Reference Toxicant within cusum chart limits	0.8-1.9mg Cu/L	2.6mg Cu/L	No*

*Test fish were of a larger size than usually used due to an unavailability of smaller fish

Toxicity Test Report: TR0529/3

(page 2 of 2)

Test Report Authorised by:

Dr Rick Krassoi, Director on 17 December 2009

Results are based on the samples in the condition as received by ESA

Citations:

USEPA (2002) methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms. Fifth edition EPA-821-R-02-012. United States Environmental Protection Agency, Office of Research and Development, Washington FC, USA.

ESA (2009) SOP 117 – *Freshwater and Marine Fish Imbalance Test. Issue No 6*. Ecotox Services Australasia, Sydney, NSW.

Toxicity Test Report: TR0529/4

(page 1 of 2)

This document is issued in accordance with NATA's accreditation requirements

Client:	Spill Tech Pty Ltd PO Box 1451 Noosaville BC QLD 4566	ESA Job #:	PR0529
Attention:	John Eddy	Date Sampled:	Not Supplied
Client Ref:	Not Supplied	Date Received:	16 October 2009
		Sampled By:	Client
		ESA Quote #:	PL0529_q01

Lab ID No.:	Sample Name:	Sample Description:
3808	Slickgone EW	Chemical product. Sample received at room temperature in apparent good condition.

Test Performed:	96-hr acute toxicity test using the amphipod <i>Allorchestes compressa</i>
Test Protocol:	ESA SOP 108 (ESA 2009), based on USEPA (2002) and Department of Transport and Communications (1990)
Deviations from Protocol:	Nil
Comments on Solution Preparation:	The highest test concentration of 73.2mg/L Slickgone EW was prepared by diluting 73.2mg of Slickgone EW with 1L of filtered seawater (FSW). The 73.2mg/L solution was serially diluted with FSW to achieve the remaining test concentrations.
Source of Test Organisms:	In-house culture, originally sourced from Queenscliff, VIC
Test Initiated:	5 November 2009 at 1600h

Sample 3808: Slickgone EW	Concentration (mg/L)	% Survival (Mean ± SD)	Vacant	Vacant
FSW control	100	± 0.0		
4.6	95.0	± 10.0		
9.2	100	± 0.0		
18.3	85.0	± 10.0		
36.6	20.0	± 16.3 *		
73.2	0.0	± 0.0		
96 hr IC10 = 18.3 (9.2-27.5)mg/L				
96 hr EC50 = 27.5 (18.3-27.5)mg/L				
NOEC = 18.3mg/L				
LOEC = 36.6mg/L				

*Significantly lower percent survival compared with the FSW Control (Steel's Many-One Rank Test, 1-tailed, P=0.05)

QA/QC Parameter	Criterion	This Test	Criterion met?
Control mean % survival	≥90.0%	100.0%	Yes
Reference Toxicant within cusum chart limits	1.4-9.6mg SDS/L	6.2mgSDS/L	Yes



Toxicity Test Report: TR0529/4

(page 2 of 2)

Test Report Authorised by:

Dr Rick Krassoi, Director on 17 December 2009

Results are based on the samples in the condition as received by ESA

NATA Accredited Laboratory Number: 14709

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Citations:

Department of Transport and Communications (1990) Guidelines for Acceptance of Oil Spill Dispersants in Australian Waters. Pollution Prevention Section, Department of Transport and Communications, Canberra ACT.

ESA (2009) SOP 108 – *Amphipod Acute Toxicity Test*. Issue No 5. Ecotox Services Australasia, Sydney, NSW.

USEPA (2002) Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms. Fifth Edition. United States Environmental Protection Agency, Office of Research and Development, Washington DC, EPA/600/4-90/027F.



Statistical Printouts for the Sea Urchin Larval Development Test

Please note: The following statistical analyses report data expressed as vol/vol, ie mL of Slickgone EW/L seawater. The statistical end-points used in the test reports have been converted to wt/vol, ie mg Slickgone EW/L seawater, where 1mL of Slickgone EW weighed 915.2mg.

Sea Urchin Larval Development Test-Proportion Normal

Start Date: 9/12/2009 16:15 Test ID: PR0529/01 Sample ID: Slickgone EW
 End Date: 12/12/2009 16:15 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 105 Test Species: HT-Heliocidaris tuberculata
 Comments:

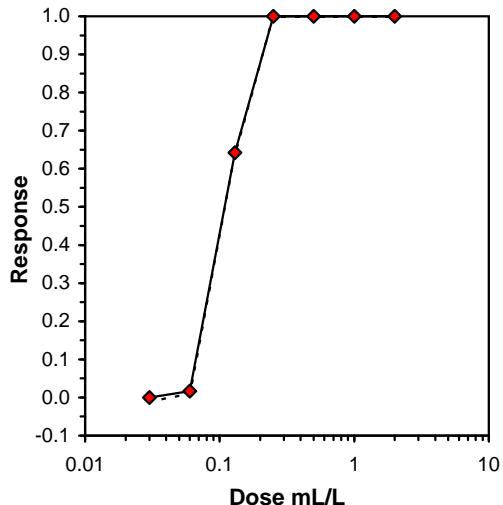
Conc-mL/L	1	2	3	4
FSW Control	0.9400	0.9000	0.9100	0.9200
0.03	0.9400	0.9200	0.9500	0.9000
0.06	0.8900	0.9100	0.9300	0.9000
0.13	0.4200	0.3600	0.2400	0.3000
0.25	0.0000	0.0000	0.0000	0.0000
0.5	0.0000	0.0000	0.0000	0.0000
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000

Conc-mL/L	Transform: Arcsin Square Root						t-Stat	Critical	MSD	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%				Mean	N-Mean
FSW Control	0.9175	1.0000	1.2806	1.2490	1.3233	2.487	4	-0.543	2.290	0.0835	0.9225 1.0000
0.03	0.9275	1.0109	1.3004	1.2490	1.3453	3.276	4	0.491	2.290	0.0835	0.9225 1.0000
0.06	0.9075	0.9891	1.2627	1.2327	1.3030	2.386	4	18.394	2.290	0.0835	0.9075 0.9837
*0.13	0.3300	0.3597	0.6100	0.5120	0.7051	13.613	4				0.3300 0.3577
0.25	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4				0.0000 0.0000
0.5	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4				0.0000 0.0000
1	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4				0.0000 0.0000
2	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4				0.0000 0.0000

Auxiliary Tests				Statistic	Critical	Skew	Kurt			
Shapiro-Wilk's Test indicates normal distribution ($p > 0.05$)				0.973785	0.887	-0.02688	0.593749			
Bartlett's Test indicates equal variances ($p = 0.28$)				3.862326	11.34487					
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	0.06	0.13	0.088318		0.05138	0.055961	0.451483	0.002658	4.3E-10	3, 12

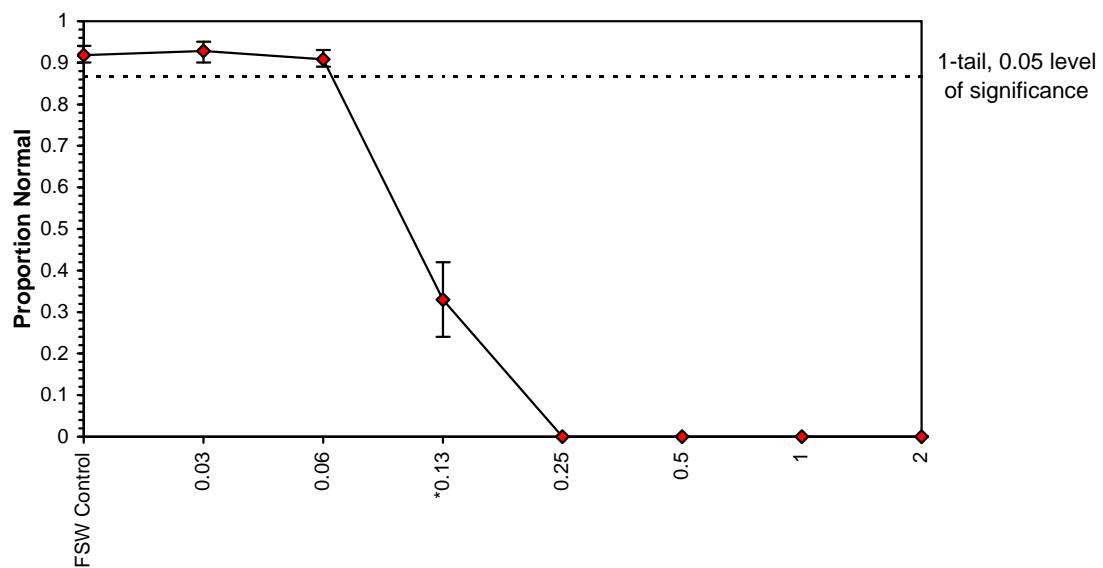
Treatments vs FSW Control

Log-Logit Interpolation (200 Resamples)				
Point	mL/L	SD	95% CL(Exp)	Skew
IC05	0.0674	0.0021	0.0612	0.0732 -0.1928
IC10	0.0759	0.0020	0.0698	0.0816 -0.1461
IC15	0.0828	0.0019	0.0768	0.0884 -0.1284
IC20	0.0887	0.0020	0.0828	0.0951 -0.1062
IC25	0.0939	0.0022	0.0875	0.1014 -0.0734
IC40	0.1079	0.0027	0.1006	0.1171 0.0418
IC50	0.1167	0.0031	0.1081	0.1279 0.1069



Sea Urchin Larval Development Test-Proportion Normal

Start Date:	9/12/2009 16:15	Test ID:	PR0529/01	Sample ID:	Slickgone EW
End Date:	12/12/2009 16:15	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 105	Test Species:	HT-Heliocidaris tuberculata
Comments:					

Dose-Response Plot

Sea Urchin Larval Development Test-Proportion Normal

Start Date:	9/12/2009 16:15	Test ID:	PR0529/01	Sample ID:	Slickgone EW
End Date:	12/12/2009 16:15	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 105	Test Species:	HT-Heliocidaris tuberculata
Comments:					

Conc-mL/L	Parameter	Auxiliary Data Summary				
		Mean	Min	Max	SD	CV%
FSW Control	% Normal	91.75	90.00	94.00	1.71	1.42
0.03		92.75	90.00	95.00	2.22	1.61
0.06		90.75	89.00	93.00	1.71	1.44
0.13		33.00	24.00	42.00	7.75	8.43
0.25		0.00	0.00	0.00	0.00	0
0.5		0.00	0.00	0.00	0.00	0
1		0.00	0.00	0.00	0.00	0
2		0.00	0.00	0.00	0.00	0
FSW Control	pH	8.10	8.10	8.10	0.00	0.00
0.03		8.10	8.10	8.10	0.00	0.00
0.06		8.10	8.10	8.10	0.00	0.00
0.13		8.10	8.10	8.10	0.00	0.00
0.25		8.10	8.10	8.10	0.00	0.00
0.5		8.10	8.10	8.10	0.00	0.00
1		8.20	8.20	8.20	0.00	0.00
2		8.20	8.20	8.20	0.00	0.00
FSW Control	Salinity ppt	34.70	34.70	34.70	0.00	0.00
0.03		34.60	34.60	34.60	0.00	0.00
0.06		34.60	34.60	34.60	0.00	0.00
0.13		34.70	34.70	34.70	0.00	0.00
0.25		34.70	34.70	34.70	0.00	0.00
0.5		34.70	34.70	34.70	0.00	0.00
1		34.70	34.70	34.70	0.00	0.00
2		34.60	34.60	34.60	0.00	0.00
FSW Control	DO % sat	98.80	98.80	98.80	0.00	0.00
0.03		100.70	100.70	100.70	0.00	0.00
0.06		98.80	98.80	98.80	0.00	0.00
0.13		98.40	98.40	98.40	0.00	0.00
0.25		98.60	98.60	98.60	0.00	0.00
0.5		99.10	99.10	99.10	0.00	0.00
1		99.20	99.20	99.20	0.00	0.00
2		99.60	99.60	99.60	0.00	0.00

Sea Urchin Larval Development Test-Proportion Normal

Start Date: 9/12/2009 16:15 Test ID: PR0529/01 Sample ID: Slickgone EW
 End Date: 12/12/2009 16:15 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 105 Test Species: HT-Heliocidaris tuberculata
 Comments:

Conc-mL/L	1	2	3	4
FSW Control	0.9400	0.9000	0.9100	0.9200
0.03	0.9400	0.9200	0.9500	0.9000
0.06	0.8900	0.9100	0.9300	0.9000
0.13	0.4200	0.3600	0.2400	0.3000
0.25	0.0000	0.0000	0.0000	0.0000
0.5	0.0000	0.0000	0.0000	0.0000
1	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000	0.0000

Transform: Arcsin Square Root

Conc-mL/L	Mean	N-Mean	Transform: Arcsin Square Root				t-Stat	1-Tailed Critical	MSD	Number Resp	Total Number
			Mean	Min	Max	CV%					
FSW Control	0.9175	1.0000	1.2806	1.2490	1.3233	2.487	4			33	400
0.03	0.9275	1.0109	1.3004	1.2490	1.3453	3.276	4	-0.543	2.290	0.0835	29
0.06	0.9075	0.9891	1.2627	1.2327	1.3030	2.386	4	0.491	2.290	0.0835	37
*0.13	0.3300	0.3597	0.6100	0.5120	0.7051	13.613	4	18.394	2.290	0.0835	268
0.25	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4			400	400
0.5	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4			400	400
1	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4			400	400
2	0.0000	0.0000	0.0500	0.0500	0.0500	0.000	4			400	400

Auxiliary Tests

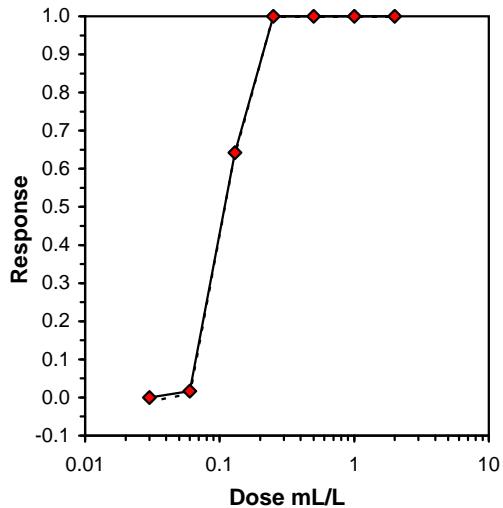
Shapiro-Wilk's Test indicates normal distribution ($p > 0.05$)	0.973785	Critical	0.887	-0.02688	0.593749
Bartlett's Test indicates equal variances ($p = 0.28$)	3.862326		11.34487		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	0.06	0.13	0.088318		0.05138	0.055961	0.451483	0.002658	4.3E-10	3, 12

Treatments vs FSW Control

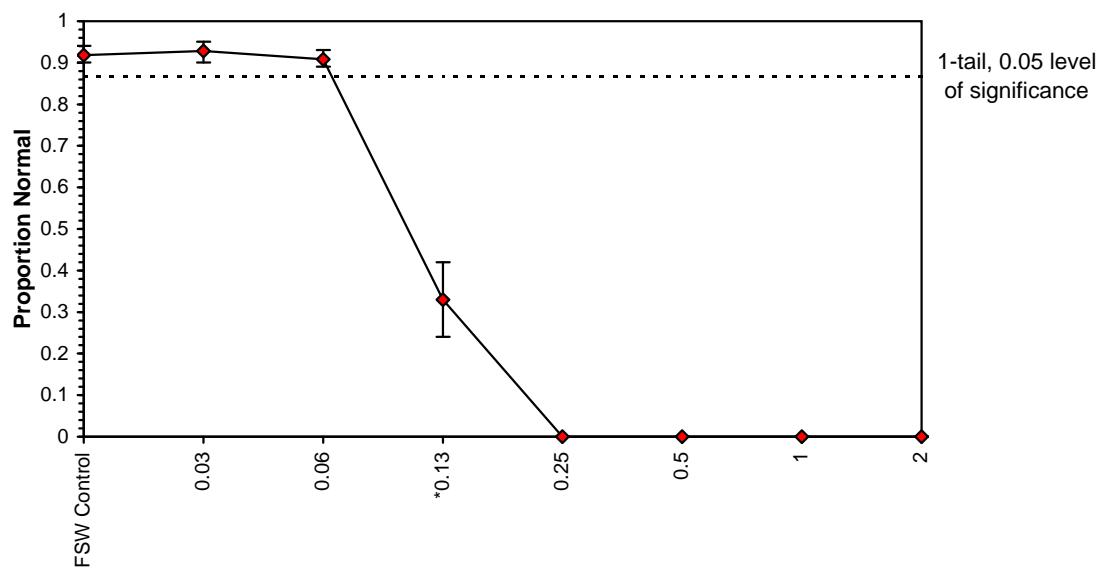
Trimmed Spearman-Karber

Trim Level	EC50	95% CL
0.0%	0.1126	0.1087
5.0%	0.1125	0.1083
10.0%	0.1118	0.1072
20.0%	0.1104	0.1048
Auto-0.0%	0.1126	0.1087



Sea Urchin Larval Development Test-Proportion Normal

Start Date:	9/12/2009 16:15	Test ID:	PR0529/01	Sample ID:	Slickgone EW
End Date:	12/12/2009 16:15	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 105	Test Species:	HT-Heliocidaris tuberculata
Comments:					

Dose-Response Plot

Sea Urchin Larval Development Test-Proportion Normal

Start Date:	9/12/2009 16:15	Test ID:	PR0529/01	Sample ID:	Slickgone EW
End Date:	12/12/2009 16:15	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 105	Test Species:	HT-Heliocidaris tuberculata
Comments:					

Conc-mL/L	Parameter	Auxiliary Data Summary					
		Mean	Min	Max	SD	CV%	N
FSW Control	% Normal	91.75	90.00	94.00	1.71	1.42	4
0.03		92.75	90.00	95.00	2.22	1.61	4
0.06		90.75	89.00	93.00	1.71	1.44	4
0.13		33.00	24.00	42.00	7.75	8.43	4
0.25		0.00	0.00	0.00	0.00	0.00	4
0.5		0.00	0.00	0.00	0.00	0.00	4
1		0.00	0.00	0.00	0.00	0.00	4
2		0.00	0.00	0.00	0.00	0.00	4
FSW Control	pH	8.10	8.10	8.10	0.00	0.00	1
0.03		8.10	8.10	8.10	0.00	0.00	1
0.06		8.10	8.10	8.10	0.00	0.00	1
0.13		8.10	8.10	8.10	0.00	0.00	1
0.25		8.10	8.10	8.10	0.00	0.00	1
0.5		8.10	8.10	8.10	0.00	0.00	1
1		8.20	8.20	8.20	0.00	0.00	1
2		8.20	8.20	8.20	0.00	0.00	1
FSW Control	Salinity ppt	34.70	34.70	34.70	0.00	0.00	1
0.03		34.60	34.60	34.60	0.00	0.00	1
0.06		34.60	34.60	34.60	0.00	0.00	1
0.13		34.70	34.70	34.70	0.00	0.00	1
0.25		34.70	34.70	34.70	0.00	0.00	1
0.5		34.70	34.70	34.70	0.00	0.00	1
1		34.70	34.70	34.70	0.00	0.00	1
2		34.60	34.60	34.60	0.00	0.00	1
FSW Control	DO % sat	98.80	98.80	98.80	0.00	0.00	1
0.03		100.70	100.70	100.70	0.00	0.00	1
0.06		98.80	98.80	98.80	0.00	0.00	1
0.13		98.40	98.40	98.40	0.00	0.00	1
0.25		98.60	98.60	98.60	0.00	0.00	1
0.5		99.10	99.10	99.10	0.00	0.00	1
1		99.20	99.20	99.20	0.00	0.00	1
2		99.60	99.60	99.60	0.00	0.00	1



Statistical Printouts for the Rock Oyster Larval Development Tests

Please note: The following statistical analyses report data expressed as vol/vol, ie mL of Slickgone EW/L seawater. The statistical end-points used in the test reports have been converted to wt/vol, ie mg Slickgone EW/L seawater, where 1mL of Slickgone EW weighed 915.2mg.

Bivalve Larval Development Test-Proportion Alive/Normal

Start Date:	3/11/2009 20:00	Test ID:	PR0529/02	Sample ID:	Slickgone EW
End Date:	5/11/2009 20:00	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 106	Test Species:	Saccostrea commercialis
Comments:					

Conc-mL/L	1	2	3	4
FSW	0.7368	0.7632	0.8684	0.7632
0.063	0.7895	0.8421	0.7368	0.7632
0.125	0.7368	0.7632	0.6579	0.7105
0.25	0.7895	0.8947	0.6842	0.7895
0.5	0.7368	0.7895	0.7105	0.7895
1	0.7632	0.7632	0.7368	0.7632
2	0.2632	0.1316	0.2105	0.1053

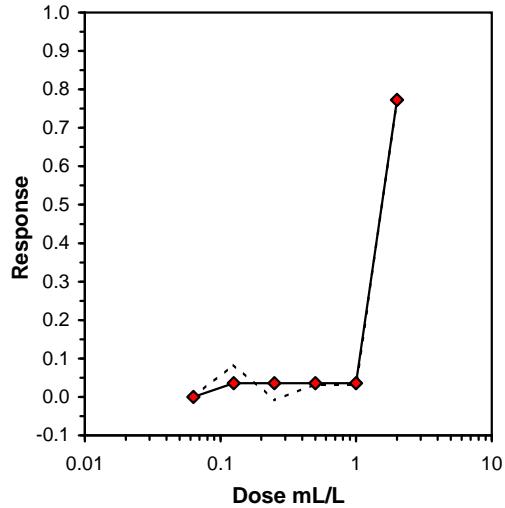
Conc-mL/L	Transform: Arcsin Square Root							t-Stat	1-Tailed Critical	MSD	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%	N				Mean	N-Mean
FSW	0.7829	1.0000	1.0892	1.0321	1.1996	6.884	4				0.7829	1.0000
0.063	0.7829	1.0000	1.0877	1.0321	1.1622	5.120	4	0.029	2.451	0.1217	0.7829	1.0000
0.125	0.7171	0.9160	1.0109	0.9460	1.0625	4.910	4	1.578	2.451	0.1217	0.7549	0.9643
0.25	0.7895	1.0084	1.1007	0.9741	1.2404	9.902	4	-0.231	2.451	0.1217	0.7549	0.9643
0.5	0.7566	0.9664	1.0558	1.0027	1.0941	4.346	4	0.673	2.451	0.1217	0.7549	0.9643
1	0.7566	0.9664	1.0549	1.0321	1.0625	1.441	4	0.690	2.451	0.1217	0.7549	0.9643
*2	0.1776	0.2269	0.4292	0.3304	0.5387	22.247	4	13.290	2.451	0.1217	0.1776	0.2269

Auxiliary Tests		Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)		0.973843	0.924	0.354919	0.194372
Bartlett's Test indicates equal variances (p = 0.16)		9.170966	16.81189		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	1	2	1.414214		0.107377	0.136708	0.235726	0.004932	3.6E-11	6, 21

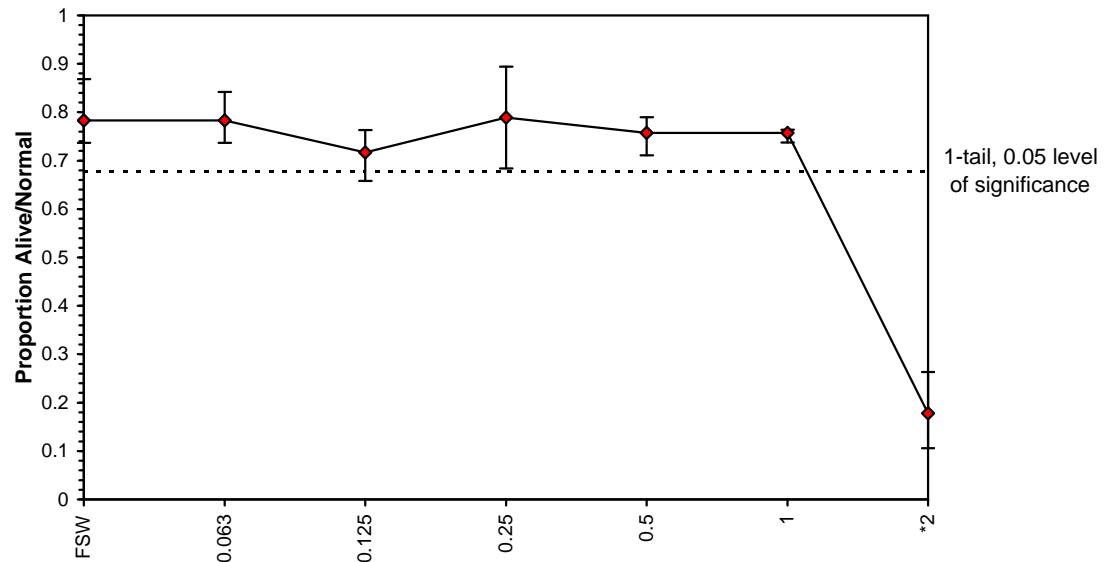
Treatments vs FSW

Log-Logit Interpolation (200 Resamples)					
Point	mL/L	SD	95% CL(Exp)	Skew	
IC05	1.0183	0.4363	0.0000	1.0802	-0.4137
IC10	1.0796	0.2014	0.0000	1.1432	-4.0928
IC15	1.1380	0.0327	1.0031	1.2090	-0.4523
IC20	1.1946	0.0324	1.0678	1.2714	-0.1127
IC25	1.2503	0.0336	1.1289	1.3346	0.1648
IC40	1.4189	0.0434	1.2853	1.5288	0.4899
IC50	1.5399	0.0539	1.3840	1.6917	0.5008



Bivalve Larval Development Test-Proportion Alive/Normal

Start Date: 3/11/2009 20:00 Test ID: PR0529/02 Sample ID: Slickgone EW
End Date: 5/11/2009 20:00 Lab ID: 3808 Sample Type: CP-Chemical product
Sample Date: Protocol: ESA 106 Test Species: Saccostrea commercialis
Comments:

Dose-Response Plot

Bivalve Larval Development Test-Proportion Alive/Normal

Start Date: 3/11/2009 20:00 Test ID: PR0529/02 Sample ID: Slickgone EW
 End Date: 5/11/2009 20:00 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 106 Test Species: Saccostrea commercialis
 Comments:

Auxiliary Data Summary							
Conc-mL/L	Parameter	Mean	Min	Max	SD	CV%	N
FSW 0.063 0.125 0.25 0.5 1 2	% Alive/Normal	78.29	73.68	86.84	5.84	3.09	4
		78.29	73.68	84.21	4.49	2.71	4
		71.71	65.79	76.32	4.49	2.96	4
		78.95	68.42	89.47	8.59	3.71	4
		75.66	71.05	78.95	3.95	2.63	4
		75.66	73.68	76.32	1.32	1.52	4
		17.76	10.53	26.32	7.25	15.15	4
FSW 0.063 0.125 0.25 0.5 1 2	pH	8.00	8.00	8.00	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.00	8.00	8.00	0.00	0.00	1
		8.00	8.00	8.00	0.00	0.00	1
FSW 0.063 0.125 0.25 0.5 1 2	Salinity ppt	34.90	34.90	34.90	0.00	0.00	1
		34.90	34.90	34.90	0.00	0.00	1
		35.00	35.00	35.00	0.00	0.00	1
		35.10	35.10	35.10	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
FSW 0.063 0.125 0.25 0.5 1 2	DO %	102.00	102.00	102.00	0.00	0.00	1
		104.60	104.60	104.60	0.00	0.00	1
		101.40	101.40	101.40	0.00	0.00	1
		100.60	100.60	100.60	0.00	0.00	1
		99.90	99.90	99.90	0.00	0.00	1
		99.60	99.60	99.60	0.00	0.00	1
		102.70	102.70	102.70	0.00	0.00	1

Bivalve Larval Development Test-Proportion Alive/Normal

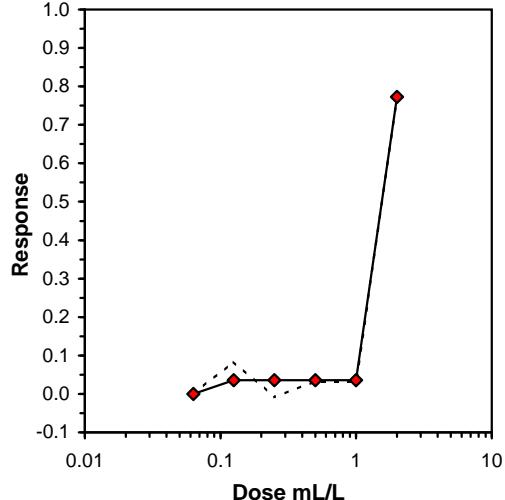
Start Date: 3/11/2009 20:00 Test ID: PR0529/02 Sample ID: Slickgone EW
 End Date: 5/11/2009 20:00 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 106 Test Species: Saccostrea commercialis
 Comments:

Conc-mL/L	1	2	3	4
FSW	0.7368	0.7632	0.8684	0.7632
0.063	0.7895	0.8421	0.7368	0.7632
0.125	0.7368	0.7632	0.6579	0.7105
0.25	0.7895	0.8947	0.6842	0.7895
0.5	0.7368	0.7895	0.7105	0.7895
1	0.7632	0.7632	0.7368	0.7632
2	0.2632	0.1316	0.2105	0.1053

Conc-mL/L	Transform: Arcsin Square Root							t-Stat	1-Tailed Critical	MSD	Number Resp	Total Number
	Mean	N-Mean	Mean	Min	Max	CV%	N					
FSW	0.7829	1.0000	1.0892	1.0321	1.1996	6.884	4				33	152
0.063	0.7829	1.0000	1.0877	1.0321	1.1622	5.120	4	0.029	2.451	0.1217	33	152
0.125	0.7171	0.9160	1.0109	0.9460	1.0625	4.910	4	1.578	2.451	0.1217	43	152
0.25	0.7895	1.0084	1.1007	0.9741	1.2404	9.902	4	-0.231	2.451	0.1217	32	152
0.5	0.7566	0.9664	1.0558	1.0027	1.0941	4.346	4	0.673	2.451	0.1217	37	152
1	0.7566	0.9664	1.0549	1.0321	1.0625	1.441	4	0.690	2.451	0.1217	37	152
*2	0.1776	0.2269	0.4292	0.3304	0.5387	22.247	4	13.290	2.451	0.1217	125	152

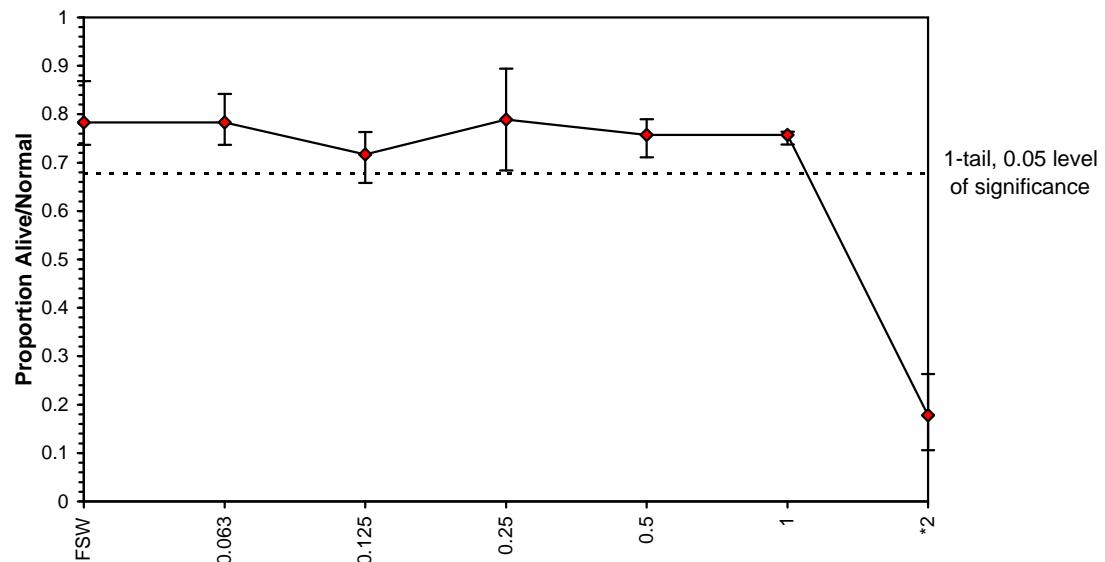
Auxiliary Tests		Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)		0.973843	0.924	0.354919	0.194372
Bartlett's Test indicates equal variances (p = 0.16)		9.170966	16.81189		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu
Dunnett's Test	1	2	1.414214		0.107377
Treatments vs FSW					0.136708
					0.235726
					0.004932
					3.6E-11
					6, 21

Trim Level	EC50	95% CL
0.0%		
5.0%		
10.0%		
20.0%		
Auto-22.7%	1.5472	1.4842
		1.6128



Bivalve Larval Development Test-Proportion Alive/Normal

Start Date: 3/11/2009 20:00 Test ID: PR0529/02 Sample ID: Slickgone EW
End Date: 5/11/2009 20:00 Lab ID: 3808 Sample Type: CP-Chemical product
Sample Date: Protocol: ESA 106 Test Species: Saccostrea commercialis
Comments:

Dose-Response Plot

Bivalve Larval Development Test-Proportion Alive/Normal

Start Date:	3/11/2009 20:00	Test ID:	PR0529/02	Sample ID:	Slickgone EW
End Date:	5/11/2009 20:00	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 106	Test Species:	Saccostrea commercialis
Comments:					

Auxiliary Data Summary							
Conc-mL/L	Parameter	Mean	Min	Max	SD	CV%	N
FSW 0.063 0.125 0.25 0.5 1 2	% Alive/Normal	78.29	73.68	86.84	5.84	3.09	4
		78.29	73.68	84.21	4.49	2.71	4
		71.71	65.79	76.32	4.49	2.96	4
		78.95	68.42	89.47	8.59	3.71	4
		75.66	71.05	78.95	3.95	2.63	4
		75.66	73.68	76.32	1.32	1.52	4
		17.76	10.53	26.32	7.25	15.15	4
FSW 0.063 0.125 0.25 0.5 1 2	pH	8.00	8.00	8.00	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.10	8.10	8.10	0.00	0.00	1
		8.00	8.00	8.00	0.00	0.00	1
		8.00	8.00	8.00	0.00	0.00	1
FSW 0.063 0.125 0.25 0.5 1 2	Salinity ppt	34.90	34.90	34.90	0.00	0.00	1
		34.90	34.90	34.90	0.00	0.00	1
		35.00	35.00	35.00	0.00	0.00	1
		35.10	35.10	35.10	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
		35.20	35.20	35.20	0.00	0.00	1
FSW 0.063 0.125 0.25 0.5 1 2	DO %	102.00	102.00	102.00	0.00	0.00	1
		104.60	104.60	104.60	0.00	0.00	1
		101.40	101.40	101.40	0.00	0.00	1
		100.60	100.60	100.60	0.00	0.00	1
		99.90	99.90	99.90	0.00	0.00	1
		99.60	99.60	99.60	0.00	0.00	1
		102.70	102.70	102.70	0.00	0.00	1



Statistical Printouts for the Larval Fish Imbalance Tests

Please note: The following statistical analyses report data expressed as vol/vol, ie mL of Slickgone EW/L seawater. The statistical end-points used in the test reports have been converted to wt/vol, ie mg Slickgone EW/L seawater, where 1mL of Slickgone EW weighed 915.2mg.

Fish Imbalance Test-96-hr Imbalanced

Start Date:	11/11/09 14:30	Test ID:	PR0529/06	Sample ID:	SLICKGONE
End Date:	15/11/09 14:30	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 117	Test Species:	LT-Lates calcarifer

Comments:

Conc-mL/L	1	2	3	4
FSW Control	1.0000	1.0000	1.0000	1.0000
0.3	1.0000	1.0000	1.0000	1.0000
0.6	1.0000	1.0000	1.0000	1.0000
1.3	0.2000	1.0000	1.0000	1.0000
2.5	0.8000	0.0000	0.6000	0.0000
5	0.0000	0.0000	0.0000	0.4000
10	0.4000	0.0000	0.0000	0.2000

Conc-mL/L	Transform: Arcsin Square Root							Rank Sum	1-Tailed Critical	Number Resp	Total Number
	Mean	N-Mean	Mean	Min	Max	CV%	N				
FSW Control	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4			0	20
0.3	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4	18.00	10.00	0	20
0.6	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4	18.00	10.00	0	20
1.3	0.8000	0.8000	1.1249	0.4636	1.3453	39.188	4	16.00	10.00	4	20
*2.5	0.3500	0.3500	0.6111	0.2255	1.1071	74.338	4	10.00	10.00	13	20
*5	0.1000	0.1000	0.3403	0.2255	0.6847	67.468	4	10.00	10.00	18	20
*10	0.1500	0.1500	0.3998	0.2255	0.6847	55.174	4	10.00	10.00	17	20

Auxiliary Tests		Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)		0.921239	0.924	-0.54378	1.568192
Equality of variance cannot be confirmed					

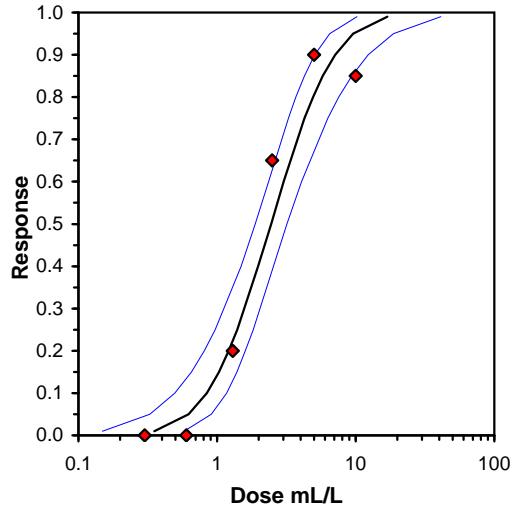
Hypothesis Test (1-tail, 0.05) NOEC LOEC ChV TU

Steel's Many-One Rank Test 1.3 2.5 1.802776

Treatments vs FSW Control

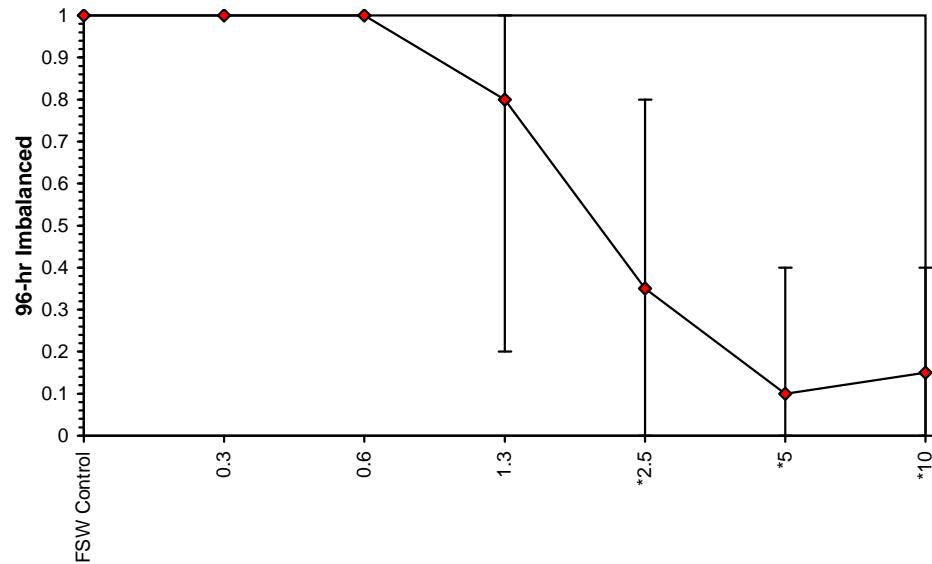
Parameter	Value	SE	Maximum Likelihood-Probit		Control	Chi-Sq	Critical	P-value	Mu	Sigma	Iter
			95% Fiducial Limits	95% Fiducial Limits							
Slope	2.769167	0.421452	1.943121	3.595212							
Intercept	3.924786	0.220707	3.492201	4.357371	0	8.935085	9.487729	0.06	0.388281	0.361119	4
TSCR											

Point	Probits	mL/L	95% Fiducial Limits
EC01	2.674	0.353339	0.149166 0.577104
EC05	3.355	0.622719	0.327951 0.910734
EC10	3.718	0.84234	0.495802 1.169263
EC15	3.964	1.032772	0.652213 1.390454
EC20	4.158	1.214381	0.807786 1.602115
EC25	4.326	1.395434	0.966797 1.81616
EC40	4.747	1.980579	1.486053 2.548765
EC50	5.000	2.445011	1.884448 3.191754
EC60	5.253	3.018348	2.347642 4.068471
EC75	5.674	4.284026	3.273216 6.294532
EC80	5.842	4.922736	3.704112 7.546632
EC85	6.036	5.78838	4.261447 9.361041
EC90	6.282	7.096985	5.060633 12.3311
EC95	6.645	9.599959	6.488703 18.66676
EC99	7.326	16.91883	10.22703 41.09179



Fish Imbalance Test-96-hr Imbalanced

Start Date:	11/11/09 14:30	Test ID:	PR0529/06	Sample ID:	SLICKGONE
End Date:	15/11/09 14:30	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 117	Test Species:	LT-Lates calcarifer
Comments:					

Dose-Response Plot

Fish Imbalance Test-96-hr Imbalanced

Start Date:	11/11/09 14:30	Test ID:	PR0529/06	Sample ID:	SLICKGONE
End Date:	15/11/09 14:30	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 117	Test Species:	LT-Lates calcarifer
Comments:					

Auxiliary Data Summary

Conc-mL/L	Parameter	Mean	Min	Max	SD	CV%	N
FSW Control	% Un-Affected	100.00	100.00	100.00	0.00	0.00	4
0.3		100.00	100.00	100.00	0.00	0.00	4
0.6		100.00	100.00	100.00	0.00	0.00	4
1.3		80.00	20.00	100.00	40.00	7.91	4
2.5		35.00	0.00	80.00	41.23	18.35	4
5		10.00	0.00	40.00	20.00	44.72	4
10		15.00	0.00	40.00	19.15	29.17	4
FSW Control	pH	8.00	8.00	8.00	0.00	0.00	1
0.3		8.00	8.00	8.00	0.00	0.00	1
0.6		8.00	8.00	8.00	0.00	0.00	1
1.3		8.10	8.10	8.10	0.00	0.00	1
2.5		8.10	8.10	8.10	0.00	0.00	1
5		8.10	8.10	8.10	0.00	0.00	1
10		8.10	8.10	8.10	0.00	0.00	1
FSW Control	Salinity ppt	34.30	34.30	34.30	0.00	0.00	1
0.3		34.40	34.40	34.40	0.00	0.00	1
0.6		34.40	34.40	34.40	0.00	0.00	1
1.3		34.40	34.40	34.40	0.00	0.00	1
2.5		34.40	34.40	34.40	0.00	0.00	1
5		34.50	34.50	34.50	0.00	0.00	1
10		34.40	34.40	34.40	0.00	0.00	1
FSW Control	% DO	102.00	102.00	102.00	0.00	0.00	1
0.3		102.80	102.80	102.80	0.00	0.00	1
0.6		102.20	102.20	102.20	0.00	0.00	1
1.3		102.60	102.60	102.60	0.00	0.00	1
2.5		102.80	102.80	102.80	0.00	0.00	1
5		103.50	103.50	103.50	0.00	0.00	1
10		106.70	106.70	106.70	0.00	0.00	1



Statistical Printouts for the Acute *Allorchestes* Toxicity Test

Please note: The following statistical analyses report data expressed as vol/vol, ie mL of Slickgone EW/L seawater. The statistical end-points used in the test reports have been converted to wt/vol, ie mg Slickgone EW/L seawater, where 1mL of Slickgone EW weighed 915.2mg.

Amphipod Acute Toxicity Test-96-h survival

Start Date: 5/11/2009 16:00 Test ID: PR0529/05 Sample ID: Slickgone EW
 End Date: 9/11/2009 16:00 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 108 Test Species: AC-Allorchestes compressa
 Comments:

Conc-mL/L	1	2	3	4
FSW Control	1.0000	1.0000	1.0000	1.0000
0.005	1.0000	0.8000	1.0000	1.0000
0.01	1.0000	1.0000	1.0000	1.0000
0.02	0.8000	0.8000	0.8000	1.0000
0.04	0.0000	0.4000	0.2000	0.2000
0.08	0.0000	0.0000	0.0000	0.0000

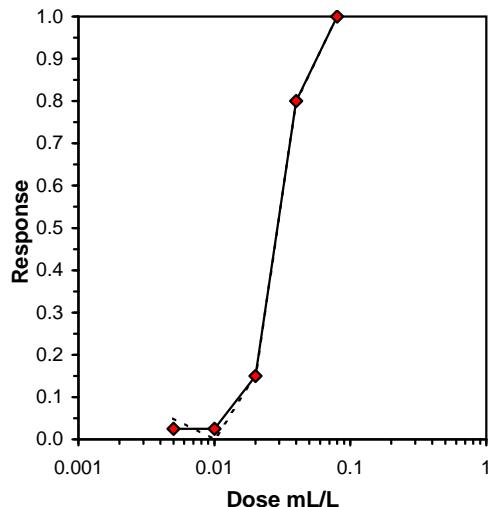
Conc-mL/L	Transform: Arcsin Square Root							Rank Sum	1-Tailed Critical	Isotonic	
	Mean	N-Mean	Mean	Min	Max	CV%	N			Mean	N-Mean
FSW Control	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4			1.0000	1.0000
0.005	0.9500	0.9500	1.2857	1.1071	1.3453	9.261	4	16.00	10.00	0.9750	0.9750
0.01	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4	18.00	10.00	0.9750	0.9750
0.02	0.8500	0.8500	1.1667	1.1071	1.3453	10.206	4	12.00	10.00	0.8500	0.8500
*0.04	0.2000	0.2000	0.4594	0.2255	0.6847	40.823	4	10.00	10.00	0.2000	0.2000
0.08	0.0000	0.0000	0.2255	0.2255	0.2255	0.000	4			0.0000	0.0000

Auxiliary Tests		Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)		0.875767	0.905	-0.07855	1.975756
Equality of variance cannot be confirmed					

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.02	0.04	0.028284	

Treatments vs FSW Control

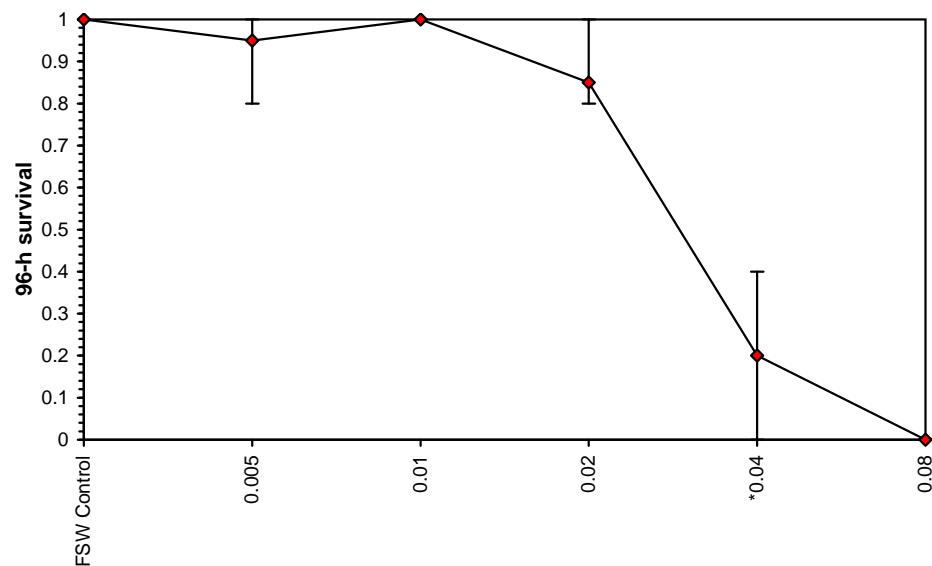
Log-Logit Interpolation (200 Resamples)				
Point	mL/L	SD	95% CL(Exp)	Skew
IC05	0.0137	0.0039	0.0000	0.0238 -0.3570
IC10	0.0176	0.0022	0.0119	0.0269 0.1081
IC15	0.0200	0.0020	0.0164	0.0289 0.9135
IC20	0.0222	0.0020	0.0187	0.0301 0.5944
IC25	0.0240	0.0018	0.0201	0.0311 0.5833
IC40	0.0285	0.0017	0.0236	0.0337 0.1366
IC50	0.0311	0.0018	0.0257	0.0366 -0.0958



Amphipod Acute Toxicity Test-96-h survival

Start Date: 5/11/2009 16:00 Test ID: PR0529/05 Sample ID: Slickgone EW
End Date: 9/11/2009 16:00 Lab ID: 3808 Sample Type: CP-Chemical product
Sample Date: Protocol: ESA 108 Test Species: AC-Allorchestes compressa
Comments:

Dose-Response Plot



Amphipod Acute Toxicity Test-96-h survival

Start Date:	5/11/2009 16:00	Test ID:	PR0529/05	Sample ID:	Slickgone EW
End Date:	9/11/2009 16:00	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 108	Test Species:	AC-Allorchestes compressa
Comments:					

Auxiliary Data Summary

Conc-mL/L	Parameter	Mean	Min	Max	SD	CV%	N
FSW Control	% Survival	100.00	100.00	100.00	0.00	0.00	4
0.005		95.00	80.00	100.00	10.00	3.33	4
0.01		100.00	100.00	100.00	0.00	0.00	4
0.02		85.00	80.00	100.00	10.00	3.72	4
0.04		20.00	0.00	40.00	16.33	20.21	4
0.08		0.00	0.00	0.00	0.00		4
FSW Control	pH	8.00	8.00	8.00	0.00	0.00	1
0.005		8.00	8.00	8.00	0.00	0.00	1
0.01		8.00	8.00	8.00	0.00	0.00	1
0.02		8.00	8.00	8.00	0.00	0.00	1
0.04		8.00	8.00	8.00	0.00	0.00	1
0.08		8.00	8.00	8.00	0.00	0.00	1
FSW Control	Salinity ppt	34.50	34.50	34.50	0.00	0.00	1
0.005		34.60	34.60	34.60	0.00	0.00	1
0.01		34.60	34.60	34.60	0.00	0.00	1
0.02		34.70	34.70	34.70	0.00	0.00	1
0.04		34.70	34.70	34.70	0.00	0.00	1
0.08		34.70	34.70	34.70	0.00	0.00	1
FSW Control	% DO	96.60	96.60	96.60	0.00	0.00	1
0.005		99.50	99.50	99.50	0.00	0.00	1
0.01		99.20	99.20	99.20	0.00	0.00	1
0.02		99.40	99.40	99.40	0.00	0.00	1
0.04		98.80	98.80	98.80	0.00	0.00	1
0.08		99.60	99.60	99.60	0.00	0.00	1

Amphipod Acute Toxicity Test-96-h survival

Start Date: 5/11/2009 16:00 Test ID: PR0529/05 Sample ID: Slickgone EW
 End Date: 9/11/2009 16:00 Lab ID: 3808 Sample Type: CP-Chemical product
 Sample Date: Protocol: ESA 108 Test Species: AC-Allorchestes compressa
 Comments:

Conc-mL/L	1	2	3	4
FSW Control	1.0000	1.0000	1.0000	1.0000
0.005	1.0000	0.8000	1.0000	1.0000
0.01	1.0000	1.0000	1.0000	1.0000
0.02	0.8000	0.8000	0.8000	1.0000
0.04	0.0000	0.4000	0.2000	0.2000
0.08	0.0000	0.0000	0.0000	0.0000

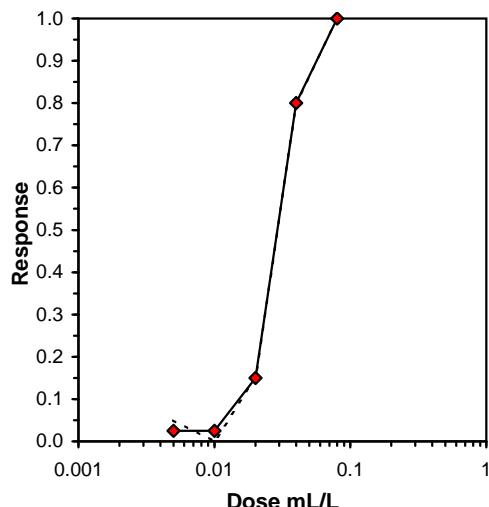
Conc-mL/L	Transform: Arcsin Square Root						Rank Sum	1-Tailed Critical	Number Resp	Total Number
	Mean	N-Mean	Mean	Min	Max	CV%				
FSW Control	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4		0	20
0.005	0.9500	0.9500	1.2857	1.1071	1.3453	9.261	4	16.00	10.00	1 20
0.01	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	4	18.00	10.00	0 20
0.02	0.8500	0.8500	1.1667	1.1071	1.3453	10.206	4	12.00	10.00	3 20
*0.04	0.2000	0.2000	0.4594	0.2255	0.6847	40.823	4	10.00	10.00	16 20
0.08	0.0000	0.0000	0.2255	0.2255	0.2255	0.000	4		20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.875767	0.905	-0.07855	1.975756
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	0.02	0.04	0.028284	

Treatments vs FSW Control

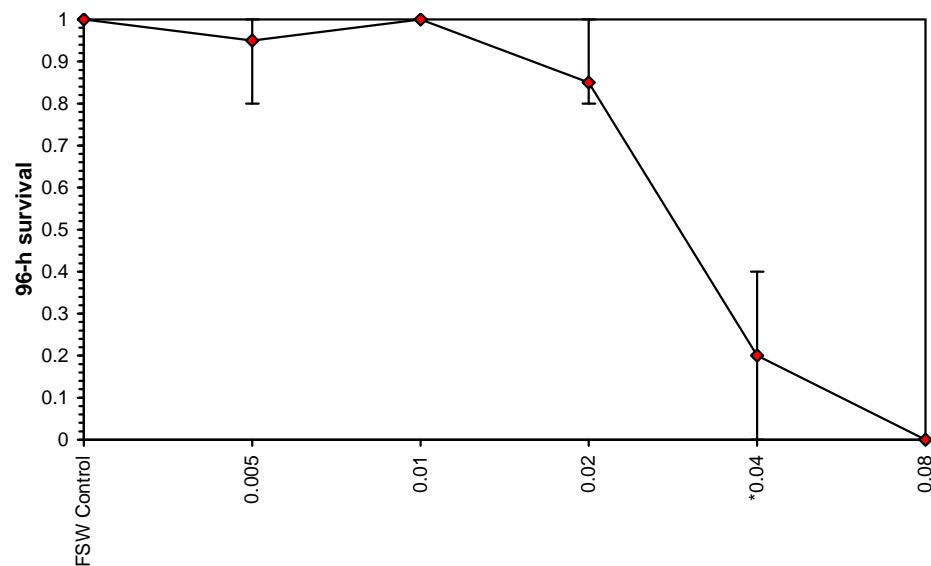
Trimmed Spearman-Karber				
Trim Level	EC50	95% CL		
0.0%				
5.0%	0.0292	0.0244	0.0350	
10.0%	0.0293	0.0245	0.0349	
20.0%	0.0290	0.0255	0.0331	
Auto-2.5%	0.0291	0.0244	0.0347	



Amphipod Acute Toxicity Test-96-h survival

Start Date: 5/11/2009 16:00 Test ID: PR0529/05 Sample ID: Slickgone EW
End Date: 9/11/2009 16:00 Lab ID: 3808 Sample Type: CP-Chemical product
Sample Date: Protocol: ESA 108 Test Species: AC-Allorchestes compressa
Comments:

Dose-Response Plot



Amphipod Acute Toxicity Test-96-h survival

Start Date:	5/11/2009 16:00	Test ID:	PR0529/05	Sample ID:	Slickgone EW
End Date:	9/11/2009 16:00	Lab ID:	3808	Sample Type:	CP-Chemical product
Sample Date:		Protocol:	ESA 108	Test Species:	AC-Allorchestes compressa
Comments:					

Auxiliary Data Summary

Conc-mL/L	Parameter	Mean	Min	Max	SD	CV%	N
FSW Control	% Survival	100.00	100.00	100.00	0.00	0.00	4
0.005		95.00	80.00	100.00	10.00	3.33	4
0.01		100.00	100.00	100.00	0.00	0.00	4
0.02		85.00	80.00	100.00	10.00	3.72	4
0.04		20.00	0.00	40.00	16.33	20.21	4
0.08		0.00	0.00	0.00	0.00		4
FSW Control	pH	8.00	8.00	8.00	0.00	0.00	1
0.005		8.00	8.00	8.00	0.00	0.00	1
0.01		8.00	8.00	8.00	0.00	0.00	1
0.02		8.00	8.00	8.00	0.00	0.00	1
0.04		8.00	8.00	8.00	0.00	0.00	1
0.08		8.00	8.00	8.00	0.00	0.00	1
FSW Control	Salinity ppt	34.50	34.50	34.50	0.00	0.00	1
0.005		34.60	34.60	34.60	0.00	0.00	1
0.01		34.60	34.60	34.60	0.00	0.00	1
0.02		34.70	34.70	34.70	0.00	0.00	1
0.04		34.70	34.70	34.70	0.00	0.00	1
0.08		34.70	34.70	34.70	0.00	0.00	1
FSW Control	% DO	96.60	96.60	96.60	0.00	0.00	1
0.005		99.50	99.50	99.50	0.00	0.00	1
0.01		99.20	99.20	99.20	0.00	0.00	1
0.02		99.40	99.40	99.40	0.00	0.00	1
0.04		98.80	98.80	98.80	0.00	0.00	1
0.08		99.60	99.60	99.60	0.00	0.00	1