

CETIS Test Evaluation Report

Report Date: 09 Nov-23 16:33 (1 of 3)
Test Code/ID: CDUD1474 / 19-3721-1715

Facility: Paramount Petroleum
Sample Site: Outfall #1 - Grab
Sample Code: CDUD1472
Sample Date: 21 Aug-23
Sample Age: 17h (2.1 °C)
Project: Alon Asphalt Company
Permittee: Alon Asphalt
Address:
Contact:
Phone:
Email:

Test Name: Topsmelt 7-d Survival and Growth Test
Organism: Atherinops affinis (topsmelt)
Protocol: EPA/600/R-95/136 (1995)
Start Date: 21 Aug-23 16:36
End Date: 28 Aug-23 16:49
Duration: 7d 0h Organism Age: 11d
Laboratory: EcoAnalysts
Address: 4770 NE View Dr.
Port Gamble
Port Gamble, WA 98364
Contact: Brian Hester, Laboratory Director
Phone: (360)297-6040
Email: bhester@ecoanalysts.com

Chronic Toxicity Evaluation

Analysis ID	Endpoint	Criteria	Conc-%	IWC	Decision	Method
11-5185-5649	7-day Survival	NOEL/LOEL	0/>0	3.4	May Fail IWC	Equal Variance t Two-Sample Test
17-7174-1849	7-day Survival	NOEL/LOEL	100/>100	3.4	Passes IWC	Steel Many-One Rank Sum Test
15-2744-5988	Biomass	NOEL/LOEL	100/>100	3.4	Passes IWC	Dunnett Multiple Comparison Test
18-8790-9136	Biomass	NOEL/LOEL	0/>0	3.4	May Fail IWC	Equal Variance t Two-Sample Test
00-1109-8992	Weight	NOEL/LOEL	100/>100	3.4	Passes IWC	Dunnett Multiple Comparison Test
13-1749-5507	Weight	NOEL/LOEL	0/>0	3.4	May Fail IWC	Equal Variance t Two-Sample Test

Test Review Comments

This toxicity test is acceptable according to test review criteria. There were no significant deficiencies in sample handling, test performance, test organism response, or statistical analysis.

The sample tested was nontoxic to this test organism.

Test Reviewer

Reviewer: Chris Dudenhoeffer, WET Coordinator
Phone: 360-407-6445
Email: cdud461@ecy.wa.gov

Signature

Date

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7-day Survival Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	D	5	0.9200	0.7840	1.0560	0.8000	1.0000	0.0490	0.1095	11.91%	0.00%
0	SC	5	0.8800	0.7440	1.0160	0.8000	1.0000	0.0490	0.1095	12.45%	4.35%
3.4		5	0.9600	0.8489	1.0710	0.8000	1.0000	0.0400	0.0894	9.32%	-4.35%
11		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	-8.70%
25		5	0.9200	0.7840	1.0560	0.8000	1.0000	0.0490	0.1095	11.91%	0.00%
50		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	-8.70%
100		5	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.0000	0.00%	-8.70%

Biomass Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	D	5	0.854	0.6593	1.049	0.714	1.08	0.07013	0.1568	18.36%	0.00%
0	SC	5	1.019	0.8402	1.197	0.8	1.136	0.06432	0.1438	14.12%	-19.30%
3.4		5	1.014	0.7651	1.263	0.696	1.192	0.08964	0.2004	19.77%	-18.74%
11		5	0.9716	0.8813	1.062	0.876	1.06	0.03254	0.07275	7.49%	-13.77%
25		5	0.8092	0.5804	1.038	0.618	1.036	0.08241	0.1843	22.77%	5.25%
50		5	0.898	0.824	0.972	0.84	0.972	0.02667	0.05963	6.64%	-5.15%
100		5	0.9988	0.8812	1.116	0.86	1.102	0.04237	0.09475	9.49%	-16.96%

Weight Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Min	Max	Std Err	Std Dev	CV%	%Effect
0	D	5	0.9302	0.7631	1.097	0.714	1.08	0.06019	0.1346	14.47%	0.00%
0	SC	5	1.17	0.9101	1.429	0.948	1.42	0.09346	0.209	17.87%	-25.74%
3.4		5	1.049	0.8796	1.218	0.87	1.192	0.06094	0.1363	12.99%	-12.75%
11		5	0.9716	0.8813	1.062	0.876	1.06	0.03254	0.07275	7.49%	-4.45%
25		5	0.8714	0.7348	1.008	0.7725	1.036	0.0492	0.11	12.62%	6.32%
50		5	0.898	0.824	0.972	0.84	0.972	0.02667	0.05963	6.64%	3.46%
100		5	0.9988	0.8812	1.116	0.86	1.102	0.04237	0.09475	9.49%	-7.37%

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7-day Survival Detail							MD5: 8151C14A92D3ACCFCD22685E83D74084
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	D	1.0000	1.0000	1.0000	0.8000	0.8000	
0	SC	1.0000	0.8000	0.8000	1.0000	0.8000	
3.4		0.8000	1.0000	1.0000	1.0000	1.0000	
11		1.0000	1.0000	1.0000	1.0000	1.0000	
25		1.0000	0.8000	1.0000	1.0000	0.8000	
50		1.0000	1.0000	1.0000	1.0000	1.0000	
100		1.0000	1.0000	1.0000	1.0000	1.0000	

Biomass Detail							MD5: B269D2AA552944FE3A2D83D4E4AE3434
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	D	0.952	0.714	1.08	0.786	0.738	
0	SC	1.13	1.08	1.136	0.948	0.8	
3.4		0.696	0.998	1.192	1.18	1.004	
11		0.876	1.014	1.06	0.924	0.984	
25		1.036	0.626	0.842	0.924	0.618	
50		0.84	0.866	0.86	0.952	0.972	
100		1.046	0.95	0.86	1.102	1.036	

Weight Detail							MD5: 6F07EC569B0A05E89B2A005E3D6BF503
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	
0	D	0.952	0.714	1.08	0.9825	0.9225	
0	SC	1.13	1.35	1.42	0.948	1	
3.4		0.87	0.998	1.192	1.18	1.004	
11		0.876	1.014	1.06	0.924	0.984	
25		1.036	0.7825	0.842	0.924	0.7725	
50		0.84	0.866	0.86	0.952	0.972	
100		1.046	0.95	0.86	1.102	1.036	

7-day Survival Binomials						
Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0	D	5/5	5/5	5/5	4/5	4/5
0	SC	5/5	4/5	4/5	5/5	4/5
3.4		4/5	5/5	5/5	5/5	5/5
11		5/5	5/5	5/5	5/5	5/5
25		5/5	4/5	5/5	5/5	4/5
50		5/5	5/5	5/5	5/5	5/5
100		5/5	5/5	5/5	5/5	5/5