



An Eco-safe Environmental Restoration System



Bioremediation Agent Effectiveness Test Pro-Act Biotech/OilClean

September 16, 2010

BIO-AQUATIC TESTING REPORT SUMMARY

GC/MS analysis showed significant reduction of alkane constituents of the test oil using PRO-ACT, as indicated by the statistically significant difference between the Day 28 controls and Day 28 treatments as well as between the Day 0 and Day 28 treatments. Day 7 results also showed a statistically significant reduction of treatments as compared to controls.

Data analysis of the GC/MS analysis showed significant reduction of aromatic constituents of the test oil using PRO-ACT as indicated by the statistically significant difference between the Day 28 controls and Day 28 treatments as well as between the Day 0 and Day 28 treatments. Day 7 results also showed a statistically significant reduction of treatments as compared to controls.

The surrogate compounds, d-10 phenanthrene and 5- α androstane showed excellent recovery indicating the test to be valid.

Microbiological results showed continued viability of the oil-eating microorganisms over time. Day 28 gravimetric analysis showed a statistically significant reduction from the controls to the treatments.

Based on the parameters of this test, the product should be deemed effective for inclusion on the NCP list of approved bioremediation products.



Bio-Aquatic Testing

2501 Mayes Road, STE 100

Carrollton, TX 75006



TCEQ NELAP Certified

LDEQ LELAP Certified

Days		Total Mean Alkanes (ppm)	Reduction% 7 Days	Reduction% 28 Days	Total Mean Aromatics	Reduction% (ppm)7 Days	Reduction% 28 Days
0	Control	41277			6100		
	Nutrient	41670			6140		
	Pro-Act	43193			6460		
7	Control	41393	0%		5705	6.475%	
	Nutrient	26370	36.717%		3640	40.717%	
	Pro-Act	302	99.301%		1979	69.365%	
28	Control	42451		0%	4546		25.48%
	Nutrient	3654		91.23%	1968		67.95%
	Pro-Act	59		99.86%	378		94.15%