

2011 A Rapid Bioassay for Predicting Toxicity of PHC-Contaminated Soil, Phase 2

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A Microtox bioassay is required before drilling waste can be disposed of on land in Alberta. The test has been the regulatory standard for toxicity testing in the Alberta drilling industry for 15 years. The traditional method involves testing a range of dilutions of a sample of fluid derived from the waste. The project being reported here concerns an equivalent, simpler version of the test, employing only one dilution level, namely the regulatory Pass threshold level (75%). The simplified method has advantages of speed and economy, requires less material and supplies, and involves fewer calculations than the traditional method. In tests with a wide range of drilling waste samples, the two methods picked out exactly the same passing and failing wastes, thus demonstrating the technical equivalence required for a valid alternative method of drilling waste testing.

2011 ALS_PHC Rapid Bioassay-913751 Report

2011 HydroQual_Bioassay Presentation