



Dear Mud and Well Log Service Provider,

Hanby PetroAnalysis is excited to have recently created a strategic alliance with To-R.E.N.E.W., LLC to assist in taking to market our new technology.

Our new technology Hanby Chemical Reaction Spectrophotometry (CRS™), utilizes a chemical reaction to create signature fingerprints for hydrocarbons, in line with DNA analysis. This chemical reaction has been time tested over the last 28 years by the sister company Hanby Environmental. Crude Oil is the most complex substance on earth. However, between 3-30% of its makeup are aromatics. The Hanby method utilizes a chemical reaction that uses the aromatics in the crude oil to create a spectral fingerprint which is created by a UV/Vis spectrometer. A simple area under the curve calculation is performed to obtain hydrocarbon concentration level. Our technology puts a laboratory in the field. **Why is this important to you?** Well, most important to your application is that our analysis is done real time. A mud sample can be obtained and the results from analysis in less than 10 minutes. Our extraction process can be performed on mud and/or cuttings. Simply testing the mud on the way in and out looking for a spike or concentration change and correlating it to depth level, will tell you when you are in and out of the formation real time. Subject to lag time of circulation, which can be accurately calculated, this provides a means of steering or guiding the bit during the drilling process. As if steering the bit wasn't enough, additionally, by the ongoing testing throughout the drilling of the well, the entire well is fingerprinted based on hydrocarbon concentration verse depth level. Another application of our technology has been to allow for real time mud or fluids adjustments to be made without the need to stop drilling and sending a formation tester down to determine needed mud weight adjustments to manage unbalanced drilling to prevent pressure changes which cause blowouts. Instead, based on being able to differentiate between levels of condensate in the mud which directly correlate to mud weight, it provides the insight needed to make adjustments real time to manage pressure changes and prevent blowout conditions. New applications for our technology continue to uncovered, as our portable field ready device is exposed to the industry. As noted, currently, our analysis takes less than 10 minutes per sample, but this is because our current device is a manual single test at a time, however, we are working on an automated generation, which will cut the analysis per sample time to a matter of minutes. Attached to this introduction letter, you will see a visual interpretation of our data in a more traditional mud log report type. It quickly and easily identifies the depth level where the highest concentration of hydrocarbon was present. This report was created from extractions from core samples post drilling. The report would look significantly different had the analysis ben done real time which would have been able to keep the drilling in the highest concentration once the spike change was encountered, but telling nonetheless.

To-R.E.N.E.W., LLC recognizes the value and has the understanding for how our technology applies across many markets related to the Oil & Gas industry. Due to their vast knowledge, expertise and strong established relationships, we are excited to be jointly introducing our technology to you as a value-add that we both believe should be of significant importance to you and your daily functions.

We welcome the opportunity to provide you additional details to show you how this should be a necessity for your ongoing business and look forward to hearing from you to set up a demonstration.

Sincerely,

Charles D. Fator

President & CEO

