

1.800.528.7411

[Computrac](#)

[Jerome](#)

[Applications](#)

[Support](#)

[About Us](#)

[Contact](#)

Computrac Upgrades Moisture Testing at Leading Lubricant Test Lab

July 20, 2016 By [Quincy Biamonte](#)

Chemists enjoy significantly faster moisture test times than Karl Fischer for new and in service lubricants.



Engineered Lubricants is one of the most advanced lubricant testing facilities in the United States. They specialize in lubricant design, quality control and investigative

lubricant analysis. Their knowledge and expertise of lubricants and machinery lubrication are instrumental in helping customers maintain equipment, optimize performance and reduce overall maintenance costs.

Engineered Lubricants is well known for their custom designed lubricants and for their work as an outside contract laboratory. Through their used oil and used fluid testing programs, they help customers with preventive and predictive maintenance, leakage control and effluent reduction. They also work with a number of companies to facilitate R&D efforts since Engineered Lubricants has access to a lot of equipment that other companies do not have access to.

With close to 50 employees and a myriad of lab instrumentation from cone penetrometers to particle counters, gas chromatographs and more, Engineered Lubricants is able to run 50 to 100 samples each day. They truly are the industry experts when it comes to machinery lubrication.

One of the more recent additions to their lab is a **Computrac Vapor Pro** moisture analyzer.

Prior to purchasing a Computrac® Vapor Pro®, Engineered Lubricants relied on Karl Fischer for moisture content determination in the various lubricants they test. However, they were running into issues when testing some of their motor oils, greases and thicker additives. Samples were not dissolving properly and tests were taking too long to complete, causing them to question the reliability of results.

“We hesitated putting [greases and other thicker samples] into the Karl Fischer because they took so long to dissolve properly,” Tracy Weaks, a chemist at Engineered Lubricants, explains. “They would stick to the probe and tended to coagulate when combined with the KF solvent.”

They began to look for an alternative to Karl Fischer that could give reliable, comparable results without lengthy test times or extensive maintenance. That is when they discovered the Computrac Vapor Pro at the 2014 Reliable Plant Conference and Exhibition.

The Computrac® Vapor Pro® is a chemical free alternative to Karl Fischer titration that is able to give moisture specific results without the use of hazardous chemical reagents or complicated test procedures. The Vapor Pro requires little maintenance and can test samples from a variety of applications at the touch of a button. It correlates well with Karl Fischer, has been shown to have shorter test times, and its intuitive design increases repeatability among tests performed by different individuals.

After sending in samples for complimentary analysis and parameter development at Arizona Instrument's facility in Chandler, Ariz., Engineered Lubricants decided to move forward with a free trial period. They were able to test the Computrac at their own facility to see firsthand how the Vapor Pro could help improve the moisture analysis process with its ease of use, lack of chemical reagents and quicker test times.

The instrument, purchased in 2015, has dramatically reduced the time needed to test for moisture in their thicker samples. It was originally purchased to help test molybdenum disulfide, an additive used in some of their products that was proving difficult to test in a Karl Fischer.



“The tests would run long or the [products] didn’t dissolve properly in the solution, and then once the test finished, we had to clean the machine before the next test could start,” Tracy explains. She continued, saying “it used to take days to test a set of 8 to 15 samples in the Karl Fischer. Testing is much easier and faster on your machine.”

The Vapor Pro was so successful with testing their samples that they began using it to test some of their other products and incoming lab samples as well. They now rely on their Computrac to test many of their incoming samples, especially those that they know will not work well on the Karl Fischer.

Overall, Tracy says that “the results from moisture testing on the Vapor Pro are very comparable to those found using the Karl Fischer. It is also easier, faster and more cost effective to use your machine. We don’t have to use nearly as much of the hazardous solvent and it is easier to clean up.”

If you are interested in learning more about moisture testing for greases or other lubricants, contact us online or give us a call at (800) 528-7411 to speak with an application consultant today.

And if you’re interested in learning more about Engineered Lubricants and their full range of lubrication products and lab services, contact them via email or give them a call at (800) 876-0008.

Filed Under: Application Notes, Computrac