



**"Analysis Done Right, On Time"**

**December 16, 2015**

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## Total Petroleum Hydrocarbons (TPH)

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### **Summary:**

Total Petroleum Hydrocarbons (TPH) analysis performed by Oilfield Labs of America follows the prescribed method prescribed in API RP 45 with regard to oil and grease analysis and the associated TPH analysis via ASTM D7066. The sample is collected in a glass container at a specified volume, then tetrachloroethylene (TCE) is added at 10% of the sample volume and shaken for 2 mins. The extract is then passed through silica gel to remove the polar constituents. The filtrate is then removed and analyzed via an IR spectrometer and measured against a known curve for oil and grease that has been extracted in TCE. Since the extract is deposited into a 10 mm quartz cuvette cell with Teflon stopper the light end volatile components are retained for measurement. Results are measured in ppm TPH

### **Instrumentation:**

**Wilks IR model InfraCal 2 TRANS-SP.** The InfraCal 2 TRANS-SP is recommended for measuring oil in water, TPH, or FOG in wastewater using the traditional EPA methods 413.2 and 418.1 or ASTM method D7066-04. With over 3,500 oil and grease monitors in worldwide use today, InfraCal 2 analyzers have become a standard for the petrochemical industry. These essential tools ensure that oil content levels are below regulated limits. The InfraCal 2 provides fast reliable, repeatable results for monitoring oil in water.

### **Quality Assurance:**

All analytical runs where customer samples are analyzed are required to pass routine QA samples at prescribed levels of accuracy several times during the analytical run. The level of accuracy is set at 10%. If the QA sample does not pass for the element in question, the problem is corrected and the sample is re-analyzed. QA data relevant to a particular sample can be provided upon request. Blanks are also added and checked against the calibration curve to insure accuracy at the bottom of the curve. These are added at the same frequency of the QA samples.