

Fact Sheet:

Dissolved/Dispersed Petroleum Hydrocarbons (DDPH) in Seawater

In 2008, NCALABS in Bangkok became the first commercial laboratory in Thailand to offer this fluorescence spectrophotometry method which yields extremely low detection limits for petroleum hydrocarbons in seawater. This method is based on the UNESCO method (Manuals and Guides No. 13), and complies with Thai Pollution Control Department (PCD) analytical requirements. Before commencing analyses, the laboratory conducted an extensive demonstration of capability, and also a statistically defensible method detection limit (MDL) study in compliance with USEPA and 40CFR136 requirements. Our reporting limit in seawater is 0.25 µg/L. NCALAB's Standard Operating Procedure (SOP) for the method includes a full suite of quality control analyses that are reported with every batch of analyses, including matrix spikes and laboratory control samples, although the original reference method did not require such QC analyses. Since commencing the DDPH analyses, we have now analyzed thousands of seawater samples using this method, and our Bangkok laboratory is the only laboratory in the TestAmerica network that currently offers this analysis.

