ProTechnics



INVASION **PROFILER™** is a tracer service that is utilized in either water or oil-based drilling fluids to measure filtrate invasion in coring and drilling operations.

INVASION PROFILER features two types of tracer:

CMT-1000 -an oil soluble tracer used to trace the oil phase of oil based drilling mud systems

Tritiated Water - a water soluble tracer used to trace the water phase of water or oil based drilling mud systems

One or both can be introduced into the mud system prior to drilling a core or drilling through a zone that is planned for formation fluid sampling.

What makes INVASION **PROFILER** effective is that neither tracer occurs naturally; when either tracer is found in a core or formation fluid sample, it is due to drilling fluid filtrate invasion. The ability to trace both phases of an oil-base drilling fluid also exists by utilizing each tracer simultaneously. There are no temperature limits on INVASION **PROFILER** tracers and mud properties are not altered.

INVASION **PROFILER** increases accuracy and confidence in the determination of fluid saturations from core analysis and fluid properties from formation test samples which are vital for refining the reservoir and petrophysical models essential in reserve estimation and facility design.

INVASION **PROFILER** is extremely effective in determining:

- Amount of Drilling Fluid Invasion in Core Samples
- Amount of Drilling Fluid Contamination in Formation Fluid Samples
- In-Situ Fluid Saturations
- True Formation Water Resistivity (Rw)

Samples collected according to a precise sample schedule provide a chronological analysis over time. These samples are analyzed at ProTechnics state of the art Chemical Tracer Laboratory in Houston, TX. Using proprietary processes and procedures in conjunction with analytical analysis the lab is capable of detection in the low parts per million (ppm) range for INVASION **PROFILER**TM.

Stringent quality control measures are in place to ensure the highest level of accuracy of all sample analysis.

INVASION PROFILER tracers are:

- HSE Friendly
- Safe to Transport, Handle, Store and Dispose