Exceptional Performance for Water-Based Fluids
Developed as a central component of Newpark’s ground-breaking Evolution™ drilling fluid system, EvoLube DPE provides incomparable lubricity in a wide range of traditional water-based fluid system formulations to significantly enhance drilling performance.

**PROVIDES OBM-LIKE LUBRICITY**
Reduces torque and drag, optimizes transmission of weight to bit to enhance penetration rates and supports efficient casing operations

**OUTSTANDING THERMAL STABILITY**
Stands up to wellbore temperatures exceeding 400° F common to numerous shale plays; also extremely effective in low-temperature environments

**CONTAMINANT RESISTANT**
Not adversely affected by CO₂, H₂S or other common formation contaminants

**EFFECTIVE IN LOW CONCENTRATIONS**
Economical and efficient wellsite management

**ENVIRONMENTALLY SOUND**
Reduces OBM-related ancillary costs and liability, protects fragile wellsite ecology

**EVOVIS™ VISCOSIFIER SYNERGY**
Provides further enhancement of lubricity and wellbore stabilization when used in combination with EvoVis™ viscosifier

**WIDE RANGING FLUID COMPATIBILITY**
Delivers effective lubrication in virtually all water-based fluids

**PDC BIT COMPATIBLE**
Keeps BHA clean; provides outstanding ROP

**LABORATORY VALIDATED, FIELD PROVEN**
Consistent, predictable and repeatable performance results

**INDUSTRY-RECOGNIZED TECHNOLOGY**
Recipient of the 2010 World Oil Innovation Award and the 2011 E&P Special Meritorious Award for Engineering Innovation
EvoLube Drilling Performance Enhancer (DPE) represents further step-change fluid technology from Newpark’s industry-recognized Research and Development team. Originating from the company’s intense Evolution fluid system design initiative, EvoLube DPE has provided outstanding results in a wide range of traditional water-based mud systems and in diverse geological, geographical and operational conditions.

EvoLube’s rugged performance capabilities have been rigorously laboratory validated in the harshest drilling environments, while its applicability has been confirmed in dozens of varying field applications. EvoLube DPE is environmentally sound at wellbore temperatures exceeding 425° F, even when coupled with troublesome field contaminants. In economically low concentrations of 2-4 percent, it stands up to CO₂, H₂S, drilled solids, salt and cement. Meanwhile, it exhibits little thermal degradation, minimizing daily maintenance cost.

EvoLube DPE is formulation and compatibility tested by Newpark researchers in each and every application for which it is recommended – ensuring predictable support of drilling, evaluation and casing efficiencies that enhance wellsites performance.
A proprietary blend of environmentally sound components, Newpark’s EvoLube DPE is redefining lubricity in water-based muds. This unique lubricant is ideal for unconventional shale gas plays and long horizontal production intervals, where its lubricating qualities routinely deliver performance results that surpass those of typical oil- and synthetic-based fluids.

**Measurable Benefits**

EvoLube DPE provides OBM-like lubricity by reducing the coefficient of friction to 0.06 to 0.09 in water-based fluids. The extreme lubricity feature optimizes transmission of weight to bit while minimizing torque and drag — thereby significantly enhancing drilling rates and minimizing problems associated with trips in and out of the wellbore. When combined, EvoLube DPE and EvoVis™ viscosifier consistently support efficient casing running operations through long horizontal production intervals.

EvoLube DPE is fully compatible with PDC bits. Its exceptional thermal stability makes it ideally suited for HPHT applications with bottom-hole temperatures to 425°F. And, its environmentally sound formulation provides expanded disposal alternatives for cuttings and fluid, while eliminating OBM-related liabilities.

**Compatible with Traditional WBM**

EvoLube DPE can be used in any water-based drilling fluid. Its lubricating capability is maximized in fluids whose overall solids content is maintained at optimum levels. EvoLube DPE is particularly effective when used in systems formulated with low clay content or in clay-free formulations (i.e. the Evolution™ drilling fluid system).

**Effective in a Wide Range of Applications**

EvoLube’s value as a stand-alone product is constantly being recognized and expanded to improve operational efficiency in a wide range of drilling fluid types and in diverse drilling applications. In elevated, moderate and lower temperature environments, in the presence of a wide array of drilling contaminants, and in diverse wellbore construction schematics, its performance results are remarkable. EvoLube DPE has proven dramatically effective in tortuous wellbores and in providing lubricity in metal-to-metal contact between casing and drilling assemblies.
EvoLube DPE has enjoyed significant success in many diverse applications, including the Cleveland Sands, Granite Wash, Austin Chalk and numerous gas shale plays, including the Haynesville, Bakken, Barnett, Eagle Ford and Woodford Shales. And the list is growing as Newpark researchers continue their investigation of EvoLube’s value in other emerging fields across North America – and the globe.

Lubricity Coefficients for Various Field and Lab Fluids Containing 3% EvoLube™ Drilling Performance Enhancer

Lubricity Coefficients in NAF vs Traditional Water-Based Drilling Fluids with EvoLube™ Drilling Performance Enhancer

[Graphs showing lubricity coefficients for different field and lab fluids containing EvoLube DPE, comparing 1% and 3% concentrations in various mud types.]