

NITRO Downhole Drilling Fluid System



THE ULTIMATE GAME CHANGER IN DRILLING LUBRICATION

ProOne Nitro is the next evolution in drilling lubrication technology. It is the proven solution for drilling challenges and well cost savings. This unmatched technology reduces heat and friction under the most extreme conditions and outperforms the competition even at low concentrations, and is compatible with all drilling fluids.

ProOne Nitro withstands high heat (beyond 500°F+), and has an unprecedented film strength of over 200,000psi. From spud to TD and everything in between, Nitro begins to work the moment it enters the well to help operators reach TD faster and safer.

Nitro is no ordinary mud lube. It turns ordinary muds into **SUPER MUDS!** When it comes to performance and maximizing well cost savings, ProOne knows the drill.



ProOne#	Size	Case Pack
51055	55 gallon/ 208L Drum	1
51275	275 gallon/ 1,040L Tote	1

YDI +®

BENEFITS OF USE

- Reduces torque
- •Increases ROP
- ·Saves drill bits
- Saves mud motors
- Reduces trips
- •Drills curves up to 50% faster
- Straighter verticals
- Minimizes twist off risk
- Helps free stuck pipe
- Reduces hook load
- Reduces well bore damage in vibration induced formations

DRILLING ISSUES SOLVED

- High torque and drag
- ·Low ROP
- Excessive trips
- •Doglegs & micro doglegs
- Deviated wells
- Top drive overheating
- ·Going through mud motors & pumps
- Chopped holes
- ·Spiraled holes

PRODUCT DATA

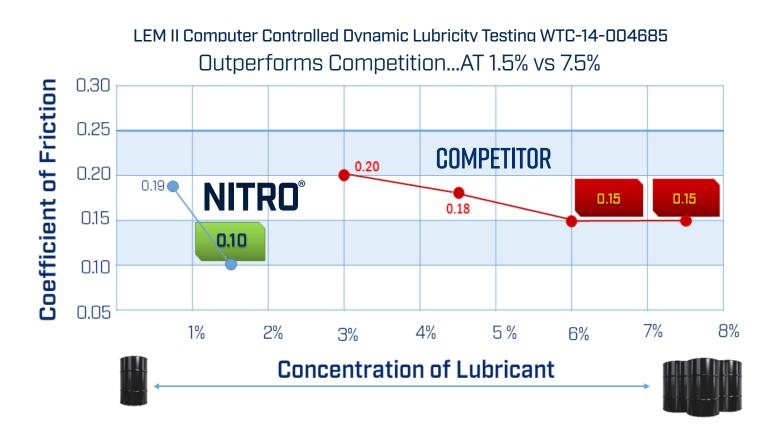
Care technology

Core technology	\rac{\rac{\rac{\rac{\rac{\rac{\rac{
Base oil	Plant based
Color	Amber
Odor	Mild
Ecological impact	Biodegradable
Solubility in water	Complete
LC-50 test (30,000 ppm to pass)	719,300ppm
Temperature range	(-14°F to 500°F+)
Flash point	400°F (204°C)
Pour point	-14°F
Specific gravity	0.93 @ 60°F (15.6°C)
рН	7.1
VOC	Nil
Stability	Yes
Health	1
Flammability	1
Reactivity	0
Non-hazardous	Class 60
Oil based mud	Compatible
Water-based mud	Compatible
Brine	Compatible



TESTED & PROVEN

An independent laboratory Dynamic Lubricity test shows that NITRO used at only 1.5% reduces the metal-to-metal coefficient of friction significantly better than a major competitor's product used at 7.5%.



ENVIRONMENTALLY FRIENDLY

Nitro not only helps reduce drilling costs but also helps operators reduce environmental risks and cleanup costs.

MYSIDOPSIS BAHIA 96-HOUR LC50 @ 3%

30,000 ppm is required to pass, industry prefers 150,000ppm. Results: 719,300ppm - PASSED

MYSIDOPSIS BAHIA 96-HOUR LC50 @ 5%

30,000 ppm is required to pass, industry prefers 150,000ppm. Results: 532,300ppm - PASSED

MIXING REQUIREMENTS:

- •Introduce at a ratio of 5% to the volume through slug pit concentration, then treat at 3%.
- Repeat process with 5% in the slug pit 4 times.