



DRILLING FLUID LUBRICATION TECHNOLOGY

FIELD PROVEN SOLUTIONS TO DRILLING CHALLENGES



FRICITION REDUCTION NPT REDUCTION FILTRATION CONTROL

POWERED BY:



TECHNOLOGY

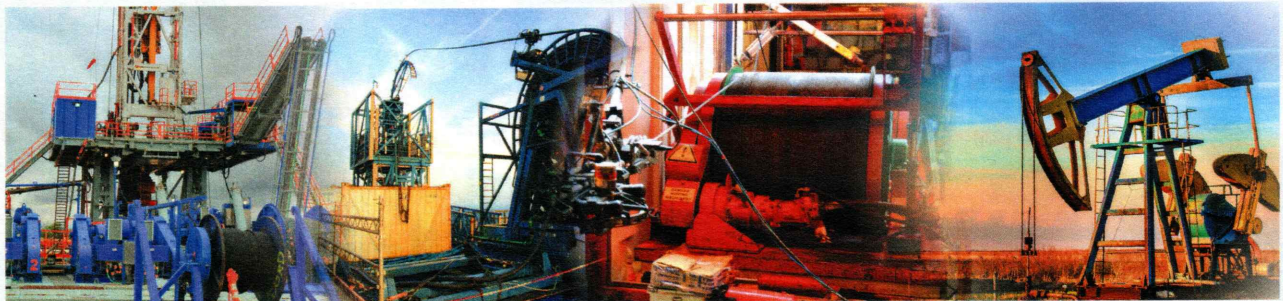


THE ULTIMATE GAME CHANGER IN DRILLING TECHNOLOGY

With operations in the Bakken, Permian, Marcellus, and international oilfields, ProOne, Inc. has developed the most advanced problem-solving technology in lubrication today which dramatically reduces heat and friction and has over 50 times the film strength of conventional lubricants. ProOne's game changing drilling technology is the ultimate answer to Rig Efficiency.

ProOne's primary focus is on the oil & gas and industrial markets where its world renowned performance environmentally-friendly line of products takes lubrication to the next level of performance in the most challenging environments.

- XPL+ Technology has been tested and certified by leading laboratories.
- Blue chip corporations use this advanced lubrication technology to offer bottom-line savings.
- ProOne's game-changing drilling products have been used in over 1,500 wells by leading oil & gas operators in multiple oilfields, proving to reduce torque, drag, reduce NPT, and save money.



XPL+ TECHNOLOGY








XPL+® has a **positively charged molecule structure** with a strong ionic (+) charge which allows it to **bond to metal** even under extreme heat and pressure, giving lubricants formulated with XPL+ unprecedented film strength and extreme pressure protection.

ProOne Downhole Drilling Fluid Treatment has been responsible for producing extraordinary results in horizontal and vertical drilling operations.



ENGINEERED FIELD-PROVEN SOLUTIONS TO DRILLING CHALLENGES

FRICITION REDUCTION TO SOLVE DRILLING PROBLEMS

- | | | |
|---|--|---|
|  HIGH TORQUE & DRAG |  NPT REDUCTION |  MINIMIZE TWIST OFF RISK |
|  LONG HORIZONTALS |  REDUCE DRILL BIT WEAR |  EXCESSIVE TRIPS |
|  TOP DRIVE OVERHEATING |  REDUCE MUD MOTOR FAILURE |  DOGLEGS |
|  LOW ROP |  DEVIATED WELLS |  STUCK PIPE |

FILTRATION CONTROL:

ProOne's advanced shale stabilizers works to ensure a well balanced weight and density for all types of muds, reducing lost circulation events.

OXIDATION REDUCTION:

ProOne is compatible with all API corrosion inhibitors.

PERFORMANCE RESULTS

On a bench cross axis friction machine test, bearings are subjected to pressure from a spinning race.

Using a leading water based mud without XPL+®, the bearing sustains severe damage at only 4,000 pounds per square inch of pressure.

With ProOne's exclusive XPL+ Technology, there is minimal damage at 200,000 per square inch of pressure...over 50 times the pressure!





POWERED BY:



TECHNOLOGY

NITRO[®] DOWNHOLE DRILLING FLUID

THE ULTIMATE GAME CHANGER IN DRILLING LUBRICATION

Formulated with ProOne's **XPL+[®] Technology**, 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.

CHARACTERISTICS:

- **HPHT**
- XPL+[®] Technology withstands high heat (beyond 500°F+)
- Has an unprecedented film strength of over 200,000psi.
- Begins to work the moment it enters the well.



Nitro turns ordinary muds and fluids into **SUPER MUDS & FLUIDS!**

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

BENEFITS OF USE

- Reduces torque and drag
- Increases ROP
- Reduces drill bit wear
- Reduces mud motor failure
- Helps reduce trips
- Drills curves up to 50% faster
- Straighter verticals
- Minimizes twist off risk

DRILLING ISSUES SOLVED

- High torque and drag
- Low ROP
- Excessive trips
- NPT
- Doglegs
- Deviated wells
- Top drive overheating
- Reduce wear in mud motors & pumps

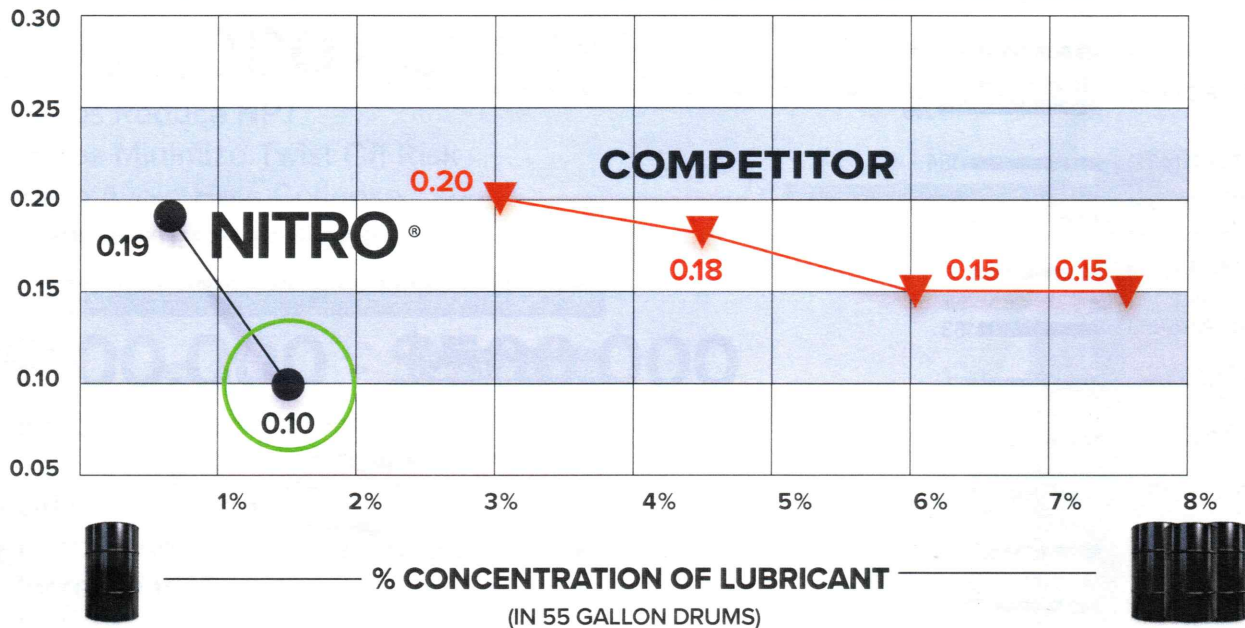
PRODUCT DATA

| | |
|---------------------------------|--------------------------|
| Core technology | XPL+ [®] |
| Base oil | Mineral Oil Based |
| Color | Light Amber |
| Odor | Mild |
| Ecological impact | Environmentally Friendly |
| Solubility in water | Complete |
| LC-50 test (30,000 ppm to pass) | 719,300ppm |
| Temperature range | N/A |
| Flash point | 400°F (204°C) |
| Pour point | -27°F |
| Specific gravity | 0.93 @ 60°F (15.6°C) |
| pH | 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%.

LEM II Computer Controlled Dynamic Lubricity Testing WTC-14-004685 OUTPERFORMS COMPETITION...AT 1.5% VS 7.5%



ENVIRONMENTALLY FRIENDLY

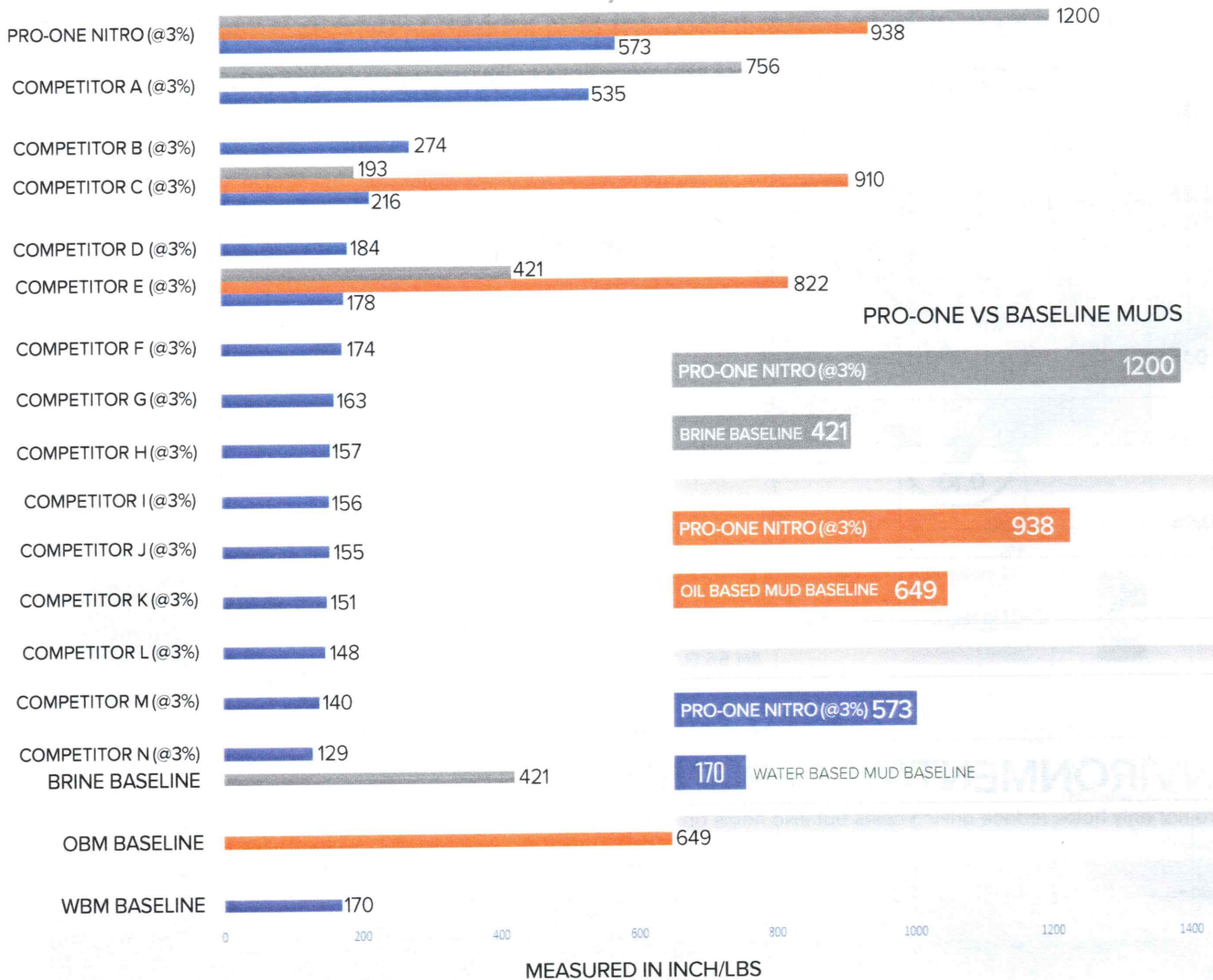
Nitro not only helps reduce drilling costs but also helps operators reduce environmental risks and cleanup costs.





PRO-ONE VS TOP DRILLING FLUIDS

The test was conducted with a mud company who secured 14 competitive lubricants for testing. ProOne went head to head with samples of Water Based, Oil Based, and Brine muds going down the hole today. These tests continue to validate the added benefit and necessity of ProOne XPL+ Technology in rig efficiency and maximum savings.



METHODOLOGY

Using a Triple Cross Axis Friction Machine similar to what is used in laboratories to test film strength of oils and lubricants, an inch-pound torque wrench is used to apply pressure between a tapered roller bearing and a spinning race. The numbered values (measured in inch-lbs) represent the maximum amount of pressure the fluid is able to withstand at point-to-point contact.

RESULTS:

- The addition of ProOne Nitro significantly increases lubricity of Brine (421 to 1200), Water-Based Mud (170 to 573), and Oil-Based Mud (649 to 938).
- Water-Based Mud with ProOne Nitro performs almost as well as Oil-Based Mud (573 vs 649)
- ProOne Nitro outperforms all other competitors on all three fluids .. Brine, Water-Based Mud and Oil-Based Mud.



DRILLING COMBINATION BOOSTS RIG EFFICIENCY

From casing to TD and everything in between, ProOne begins to work the moment it enters the well. Although it can be added at any stage, cost savings begin from spud, exponentially increasing all the way to TD.

\$500,000 - \$1,000,000 +

- Helps Reduce NPT
- Helps Minimize Twist Off Risk
- Help Avoid Hole Collapse
- TD in High Torque Conditions

\$100,000 - \$500,000

- Help Save Mud Motors
- Save Drill Bits
- Drill String Repair
- Hard Banding
- Increase ROP
- Helps Save Trips

\$10,000 - \$100,000

- Help Reduce Pump Wear
- Set Casing Faster
- Slide Liners Faster
- Straighter Verticals
- Reduce Torque



ProOne's time proven lubrication technology ensures dramatic costs savings and higher return.

“In five decades looking at just about every lubricant product on the market, I have never seen anything like ProOne’s XPL+ Technology.”
 - Major Operator/ Texas



BIO-STABLE

DRILLING FLUID LUBRICANT

Powered by  Technology

EPA APPROVED FOR OFFSHORE USE
BIODEGRADABLE DRILLING FLUID

ProOne’s **BIO-STABLE Drilling Fluid Lubricant** is formulated with ProOne’s powerful XPL+ lubrication technology. It is designed to reduce heat and friction under the most extreme conditions and has been proven to offer extraordinary results in horizontal and vertical drilling operations.

BIO-STABLE can be used in oil-based mud, water-based mud, brine, and is safe for offshore use.



ADVANTAGES:

- Increases lubricity
- Improves ROP
- Easier steering and sliding
- Less corrosion and wear
- Saves mud pumps and mud motors
- Extends drill bit life

| ProOne# | Size | Case Pack |
|---------|-------------------------|-----------|
| 23005 | 5 gallon/ 18.9L Pail | 1 |
| 23055 | 55 gallon/ 208L Drum | 1 |
| 23275 | 275 gallon/ 1,040L Tote | 1 |

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:

| | |
|------------------------|-----------------------------|
| Core technology | XPL+® |
| Base oil | Plant based |
| Color | Clear amber |
| Odor | Mild |
| ph | 8.7 |
| Solubility in water | Complete |
| Relative density | 0.97 |
| Temperature range | (-14°F to 500°F+) |
| Stability | Yes |
| Health | 1 |
| Flammability | 1 |
| Reactivity | 2 |
| Oil based mud | Compatible |
| Water-based mud | Compatible |
| Brine | Compatible |
| OECD 301B | Ultimate biodegradable |
| LC-50 Test @3% Pass | 464,800ppm (30,000 to pass) |
| LC-50 Test @5% Pass | 239,100ppm (30,000 to pass) |
| Fathead minnow 96-hour | 96-hour =>750 ml/L- Passed |

MIXING REQUIREMENTS

- Introduce at a ratio of 5% to the volume through slug pit concentration, then treat at 1-3% as needed.



MAJOR OPERATOR - SHAFTER, CA

A deep, highly deviated well was being drilled with a 12.8 ppg clay-based mud system. High and erratic torque and drag levels were encountered while drilling 6/18 " hole below 12,500', with a well deviation of over 87°. Projected TD was 13,000', and the rig top drive capacity was rated at 9,500 ft.-lbs. with the existing drill pipe.

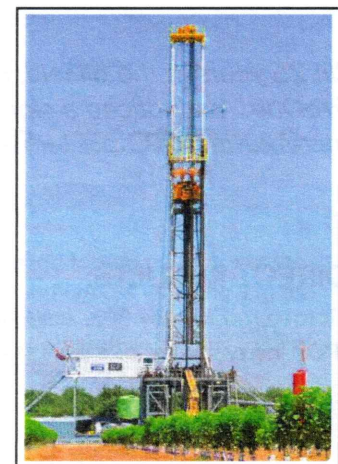
A desire was expressed to attempt to extend the total depth of the well an additional 500', to 13,500'. At the same time, while drilling below 12,500' (about 500' from the initially projected TD) torque and drag in this highly directional well were becoming excessive and wildly variable, potentially limiting the ability of the rig to obtain the desired TD with current conditions.

| DATE/TIME | DEPTH | TORQUE (ft.lbs.) | DRAG (#, PUMP OFF) | DRAG (#, PUMP ON) |
|----------------------|----------------|------------------|--------------------|-------------------|
| 7/31 - 4:30pm | 12,300' | 7,200 | | |
| 7/31 - 6:00pm | 12,340' | 8,500 | | |
| 7/31 - 6:30pm | 12,400' | 8,600 | 65,000 | |
| 7/31 - 7:30pm | 12,450' | 7,500 | 74,000 | 57,000 |
| 7/31 - 8:30pm | 12,500' | 7,700 | 66,000 | 28,000 |
| 7/31 - 9:30pm | 12,550' | 7,400 - 7,800 | | |
| 7/31 - 10:30pm | 12,600' | 7,800 - 8,800 | 76,000 | |
| 7/31 - 11:00pm | 12,650' | 8,500 - 8,900 | 75,000 | 30,000 |
| 7/31 - 12:30am | 12,700' | 8,000 - 8,500 | 84,000 | |
| PRO-ONE ADDED | | | | |
| 8/1 - 1:30am | 12,750' | 7,000 | | |
| 8/1 - 3:00am | 12,800' | 7,200 - 8,000 | 50,000 | 16,000 |
| 8/1 - 4:00am | 12,835' (TRIP) | 6,000 - 6,600 | 50,000 | 14,000 |
| 8/2 - 10:00am | 12,850' | 5,800 - 6,400 | | |
| 8/2 - 11:15am | 12,900' | 6,200 - 6,700 | | |
| 8/2 - 12:30am | 12,950' | 6,800 | 50,000 | 12,000 |
| 8/2 - 2:00pm | 12,988' | 6,800 | 19,000 | 9,000 |

DIRECT RESULTS

1. ProOne reduced torque from 8,500 ft. lbs. to 6,000 ft. lbs. (a direct reduction of 29%)
2. ProOne reduced drag from 84,000 lbs. to 50,000 lbs (direct reduction of 40%)
3. ProOne reduced circulating drag from 30,000 lbs. to 12,000 lbs. (direct reduction of 60%)

The addition of ProOne DHDF reduced torque and drag immediately and significantly. The enhanced lubricity provided by ProOne DHDF extended rig capacity on this well, supporting the desire to deepen the well and additional 500', and possibly further.





MAJOR OPERATOR - CANADIAN, TEXAS

"We would not have been able to complete this well without ProOne." - Company Man

DIRECT RESULTS:

- Prior to adding ProOne, torque was maxed out at 15,500 ft./lbs.
- ProOne reduced torque 37% from 15,500 ft./lbs. to 9,700 ft./lbs.
- ProOne increased ROP 12% from 22.75 fph to 25.50 fph.
- Reduced drill curve time from 64 to 30 hours
- Operator reached TD with ProOne

| | |
|--|-----------|
| 2 trip outs @ 60,000 each | \$120,000 |
| 2 drill bits @ \$15,500 each | \$31,000 |
| Reduced drill curve time | \$85,000 |
| <small>34 Hours Faster (64 to 30 hours) @ \$2,500 per hour</small> | |
| ROP @ curve to TD 4,437 ft. @ 25.50 fph | \$52,500 |
| <small>(Increase of ROP 12% Savings 21 hours x \$2,500)</small> | |
| No hard-banding needed! (Magnets Stayed Clean) | \$12,047 |

GROSS SAVINGS **\$300,547**



MAJOR OPERATOR - EDDY, NEW MEXICO

Longest Lateral in New Mexico History at the time. - 19,770 ft.

"In 25 years in the oilfield, I have never seen anything like ProOne. We noticed a significant torque reduction and increase in ROP" - Company Man

DIRECT RESULTS:

- Torque reduced by 50% (maxed out from 30,000 ft./lbs. to 15,000 ft./lbs.)
- ROP increased by 28% (from 41 fph to 57.5 fph)



MAJOR OPERATOR - ALICE, NEW MEXICO

Longest Lateral for Drilling Company at Location - 20,300 ft. TD

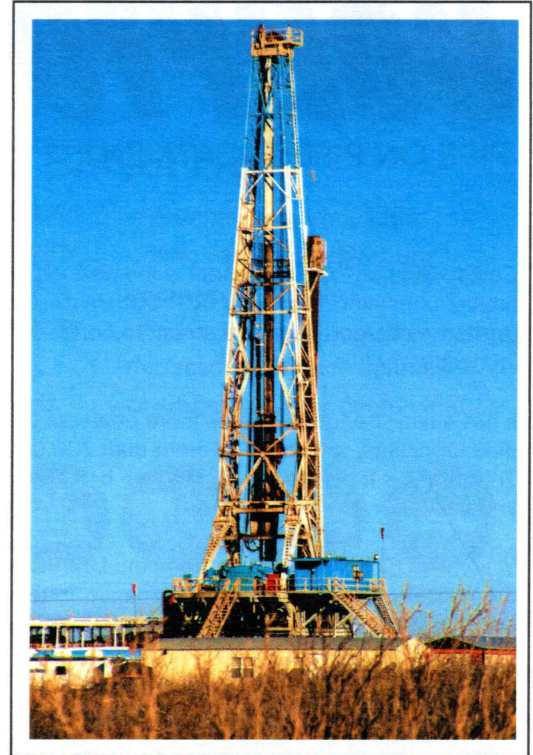
Company experienced significant lubricity issues on formation and used 18 totes of competitor lubricant from EOC to 13,280 ft. without any results.

OVERVIEW:

- Nitro introduced at 13,280 ft.
- Applied at 0.75% on first tote
- Added at 2.5gpm of mud pump volume of 610gpm for remainder of 12, 290 ft. lateral and reached TD.

DIRECT RESULTS:

Torque never exceeded 28,000 ft./lbs. (operated between 26k to 28k)
 At EOC (end of curve) rig was right on AFE (authority for expenditure)
 Maintained ROP of 1630 ft. per day putting rig 2 days ahead of schedule
 Well TD'd at 22,300ft.



MAJOR OPERATOR - LAREDO, TEXAS



"Stuck drill string at 11,400ft. Leading spotting fluid was unsuccessful in recovery. After four sweeps of ProOne the string was extracted from the hole...amazing!"

- Company Man

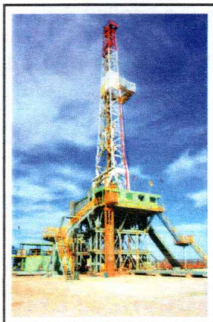
MAJOR OPERATOR - BAKKEN, ND



"Saved 4 to 6 days at \$90,000 per day over previous 3 holes drilled using a different lube."

- Company Man

MAJOR OPERATOR - JAL, NEW MEXICO



"Could not set casing for 24 hours. ProOne was used in 2 to 8 barrel sweeps. After the 4th drum, the casing fell to the bottom. ProOne saved us \$250,000 and 4-5 days drilling."

- Company Man

MAJOR OPERATOR - PECOS, TEXAS



"Reduced torque by 44%, cut the curve in 17 hours vs 22 saving us \$49,583"

- Company Man

CoilPro™

PIPE ON PIPE TREATMENT



Powered By

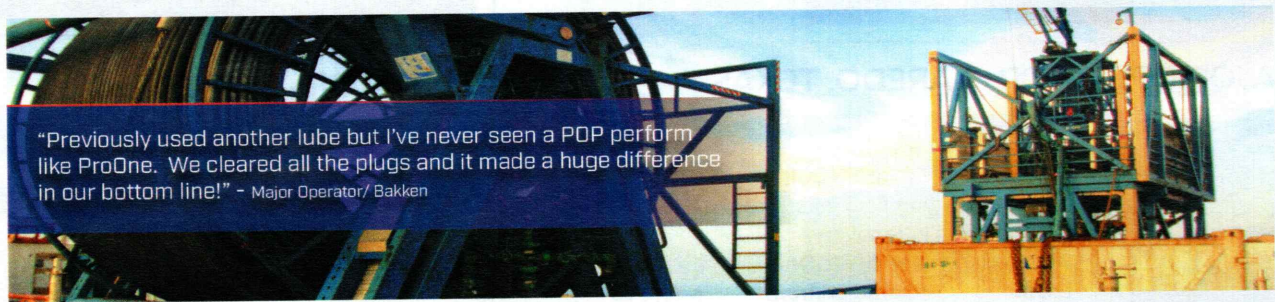


Technology

CoilPro Pipe on Pipe Treatment is the next evolution in coil tubing lubrication. Powered by ProOne's exclusive XPL+ this positively charged molecule structure bonds to metal, optimizing lubrication.

It has a film strength 50 times more powerful than conventional pipe lubricants, withstanding more than 200,000 psi of pressure! This reduces the coefficient of friction between the coil tubing and casing.

In addition CoilPro added to the Pump Liner Wash System will dramatically increase pump performance, extend the life of pistons, liners, swabs and springs by up to 60%!



"Previously used another lube but I've never seen a POP perform like ProOne. We cleared all the plugs and it made a huge difference in our bottom line!" - Major Operator/ Bakken

ADVANTAGES:

- Attracted to Hot Spots
- Withstands High Heat (beyond 600°F)
- Reduces Pipe on Pipe Friction
- Unprecedented Film Strength (over 200,000psi)
- Water Dispersible
- Helps Increase WOB
- Environmentally Friendly
- Personnel Friendly - Non-Toxic

TREATMENT:

- Standard Usage - 1 gallon per 1,000 gallons
- Deviated Well - 2 gallons per 1,000 gallons

BENEFITS OF USE:

- Mill frac-plugs
- Lubricates the entire casing and CT BHA thereby increasing lateral reach

| ProOne# | Size | Case Pack |
|---------|-------------------------|-----------|
| 50005 | 5 gallon/18.9L | 1 |
| 50275 | 275 gallon/ 1,040L Tote | 1 |



FUEL MAXIMIZER

ADVANCED FUEL CONDITIONING CATALYST

BOTTOM LINE BENEFITS:

- Improves engine performance
- Improvement in fuel economy
- Virtually eliminates opacity
- Conditions fuel during storage
- Reduces ash formation
- Adds lubricity to diesel fuels
- Prevents carbon buildup
- Improves engine start-ups
- Increases BTU's
- Cleans fuel system and injectors
- No mixing - blends instantly
- Addresses water contamination



TREATMENT RATIO

1:4000 or 1oz per 30 gallons.
Double dose first tank.
Add at every fill up.

| ProOne# | Size | Case Pack |
|---------|----------------------|-----------|
| 32001 | 1 Gallon/3.78L | 4 |
| 32055 | 55 Gallon Drum /208L | 1 |

BEFORE

Fuels chemical energy is stored in a Hydrocarbon.

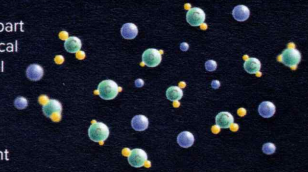
In this state Hydrocarbons do not burn completely resulting in carbon, soot, and harmful emissions.



AFTER

Fuel Maximizer is a catalyst that breaks apart large particulates, accelerating the chemical reaction of fuel thus liberating its chemical energy.

Makes Oxygen available to burn more completely thus producing a more efficient burn.



MAJOR DRILLING OPERATOR - TEXAS

BEFORE ProOne Fuel Maximizer

- 26 day operation
- 54,490 gallons of diesel used
- 2,096 gallons per day

AFTER ProOne Fuel Maximizer

- 15 day operation
- 28,123 gallons
- 1,875 gallons per day

Total Savings based on 28 Days of Operation

11.18% Fuel Savings in same location
221 Gallons of fuel less per day

\$17,111 saved per month!





RIG MAINTENANCE

PROTECT YOUR RIG EQUIPMENT

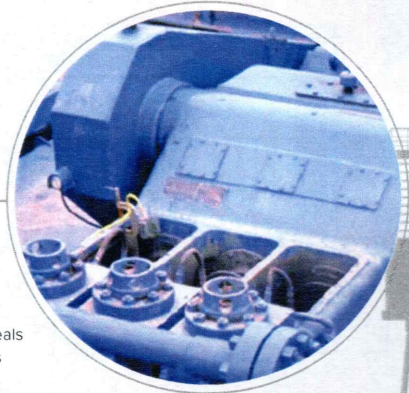
ProOne's lubrication arsenal extends to all rig level drilling applications. ProOne products are specifically designed to provide the best protection and performance, solve lubrication problems, reduce downtime, and allow equipment to operate safely and efficiently.



MUD PUMP/ BEARINGS EP-2 Heavy Duty Industrial Grease

- Extreme load carrying capability
- Protects liners, tensioners, pistons, seals, and guides
- Withstands extreme high temperature
- Water Resistant

- All grease zerks
- Chain couplings
- Crown blocks
- Pipe dope - drill pipes/collars
- Pillow blocks
- Sliding control rods
- Rotating brake shafts
- Spline shaft adapter cavities
- Swivel bearings
- Packing sets
- Centrifugal pump seals
- Kelly bushing rollers



MUD PUMPS/ BULL GEAR OIL Industrial Oil Concentrate

- Dramatically reduces wear on pumps
- Superior load carrying capacity for bull gears and components
- Superior corrosion resistance



DIESEL GENERATORS/ ENGINE OIL Heavy Duty Oil Stabilizer

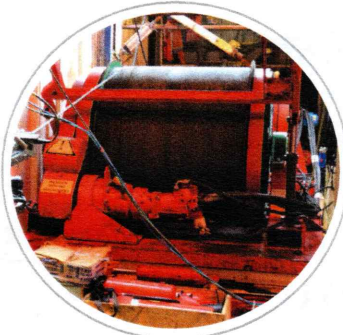
- Extreme pressure protection
- Slows oil burning & oil leaks
- Helps restore compression
- Improves performance
- Extends engine life
- Extends oil change intervals 25% to 50%



DIESEL GENERATORS/ FUEL Fuel Maximizer - Concentrated Fuel Conditioner

- Helps reduce fuel consumption
- Virtually eliminates opacity
- Reduces ash formation
- Adds lubricity to fuels
- Prevents carbon build-up
- Cleans fuel system and injectors
- Improves engine performance





DRAW WORKS/ WIRE XPL-101 Penetrating Lubricant

- High load carrying capability
- Protects lines from abrasion
- Resists elements such as water, soil, sand, clay, and gravel
- Withstands extreme high and low temperature operations

- Kelly pins
- Open chains
- Sprocket
- Pull down chains
- Pivot pins
- Tongs
- Mast hinge
- Cylinder pins
- Screw jacks
- Brake band pins
- Nuts & bolts
- Latches
- Rollers
- Electrical
- Fasteners
- Bearings



CROWNBLOCK/ BEARINGS/ PINS EP-2 Heavy Duty Industrial Grease

- Extreme load carrying capability
- Corrosion resistant
- Withstands extreme high temperature



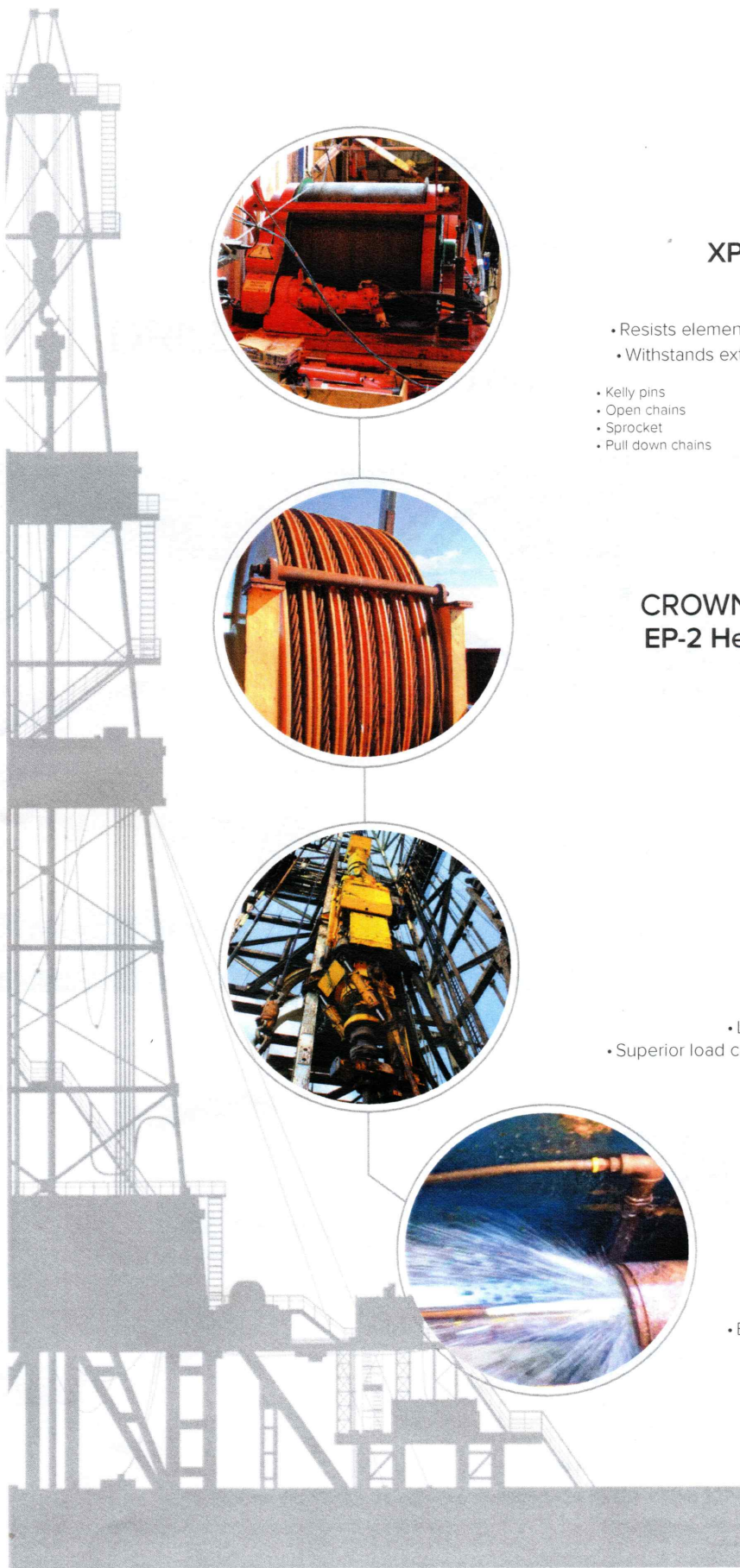
TOP DRIVE Hydraulic Treatment

- Lowers friction and operating temperatures
- Superior load carrying capacity for gears and components
- Superior corrosion resistance



PUMP LINER WASH

- Added @ 8oz intervals twice a day
- Increase pump performance
- Extend life of pistons, liners, swabs, and springs by 60%





ProOne, Inc. - Corporate Headquarters
1370 S. Acacia Ave.
Fullerton, CA 92831
Phone: (714) 327-0262
Fax: (949) 535-2135
www.pro1energy.com

2024 ProOne Inc. © All Rights Reserved