



**Technological & Environmental Advancements
in Hydraulic Fracturing**
Reducing the Cost of Unconventional Development

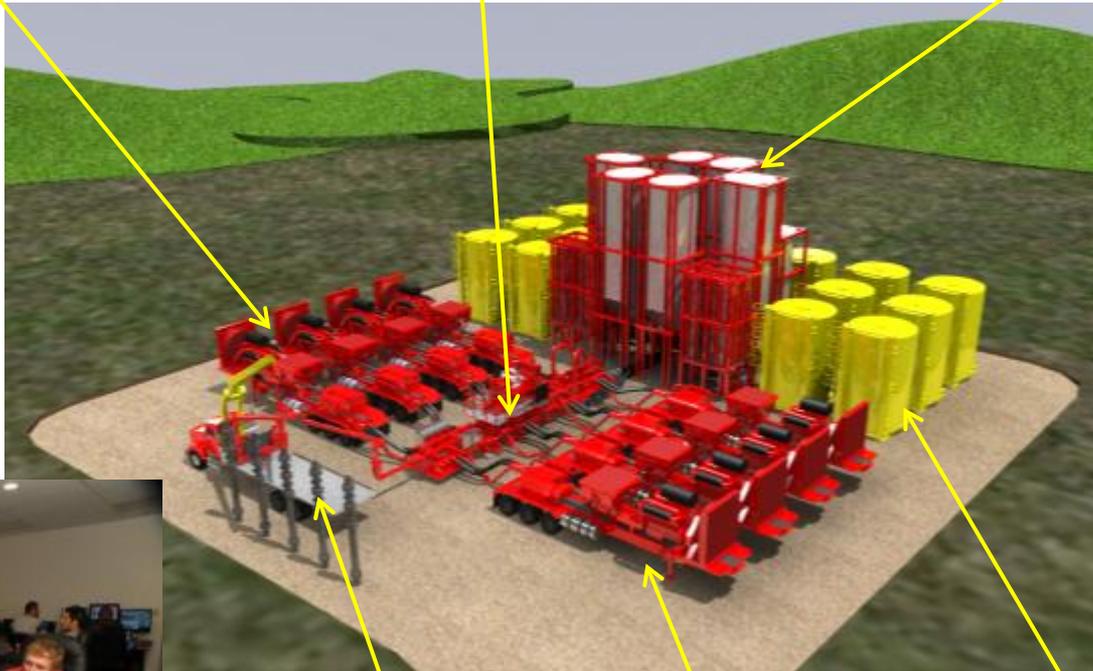
HALLIBURTON

Frac of the Future Equipment

Q10™ Pumping Units

High Rate Manifold Trailer

Integrated Bulk Storage/Mixing System



Remote Operations Center

Wellhead Connection Unit

Wireless LAN

Fluid storage tanks

Dual Fuel Technology



Dual Fuel Capability



Combination of diesel and natural gas used for fuel

- Benefits**
- Reduced emissions
 - Reduced fuel cost
 - Reduced fuel transportation

Frac of the Future Equipment SandCastle™ Proppant Storage Unit



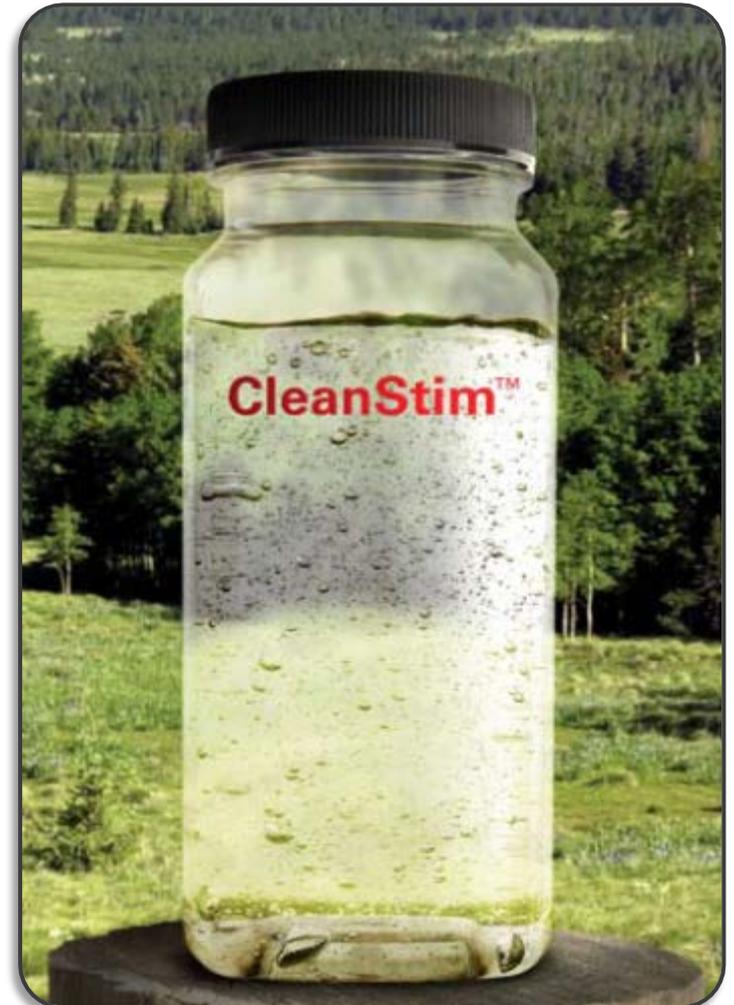
Benefits

- Reduced footprint
- Self-contained
- Solar powered
- Gravity feed
- Weighing system

CleanSuite Technologies

CleanStim[®] Fracturing Fluid Formulation

- Ingredients sourced exclusively from the food industry
- Adds an extra measure of safety for personnel, animals and the environment
- The industry's only complete system sourced from the food industry.



CleanWave[®] Water Recycling Service

- Electrical charge coagulates suspended matter
- Scalable – Multiple units work together to handle total flow in real time
- Available for mobile applications and at fixed central facilities
- Handles wide variety of source waters (*TDS range = 100 to 300,000 mg/l*)



CleanStream® UV Bacteria Control System



- Use of ultraviolet light to control the growth of bacteria
- Minimizes or even eliminates a class of chemicals (biocides) traditionally used in frac fluids
- Important to control bacteria because bacteria can:
 - Interfere with fluid chemistry
 - Create corrosion issues
 - Harm the reservoir

Customized Fracture Treatment Manufacturing

