

# DRILLING, COMPLETION & WORKOVER FLUIDS

## 2015



Special Supplement to  
**World Oil**  
Published in June 2015

Using X-ray diffraction spectrometry, Newpark chemists identify crystalline phases of solid inorganic materials. Image courtesy of Newpark Drilling Fluids.

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## SHALE INHIBITORS

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# World Oil's fluids nomenclature

These system descriptions and product definitions reflect general industry practice and terminology consistent with descriptions adopted by the American Petroleum Institute (API) and the International Association of Drilling Contractors (IADC).

## WATER-BASED SYSTEMS

**Non-dispersed.** These systems include spud muds, natural muds and other lightly treated systems that are generally used for shallow wells or top-hole drilling. Thinners and dispersants are not added to disperse drill solids and clay particles.

**Dispersed.** At greater depths, where higher densities are required, or where hole conditions may be problematic, muds are often dispersed, typically with lignosulfonates, lignites or tannins. These, and similar products, are effective defloculants and filtrate reducers. Potassium-containing chemicals are frequently used to provide greater shale inhibition. Specialized chemicals are also added to adjust or maintain specific mud properties.

**Calcium-treated.** Divalent cations, such as calcium and magnesium, when added to a freshwater drilling mud, inhibit formation clay and shale swelling. High levels of soluble calcium are used to control sloughing shale and hole enlargement, and to prevent formation damage. Hydrated lime, gypsum and calcium chloride are principal ingredients of calcium systems. Calcium-treated muds resist salt and anhydrite contamination but are susceptible to gelation and solidification at high temperatures.

**High-performance water-based muds (HPWBM).** These are usually reformulated polymer systems containing system-specific products to deliver shale stability, clay and cuttings inhibition, lubricity and high ROP, while minimizing bit balling/accretion and downhole torque problems. Some HPWBM use borehole-stabilizing

products to reduce pore pressure transmission similar to oil-based muds.

**Low-solids.** Listings include systems in which the volume and type of solids are controlled. Total solids should not range higher than about 6% to 10% by volume. Clay solids should be some 3% or less and exhibit a ratio of drilled solids to bentonite of less than 2:1. Low-solids systems typically use polymer additive as a viscosifier or bentonite extender and are non-dispersed.

**Polymer/PA/PHPA.** Muds incorporating generally long-chain, high-molecular-weight polymers are used either to encapsulate drill solids to prevent dispersion and coat shales for inhibition, or to increase viscosity and reduce fluid loss. Various polymers are available for these purposes, including cellulose, natural gum-based products and acrylamide. Frequently, inhibiting salts, such as KCl or NaCl, are used to provide greater shale stability. These systems usually contain a minimum amount of bentonite and may be sensitive to divalent cations, such as calcium and magnesium. Most polymers have temperature limits below 300°F but, under certain conditions, may be used in hotter wells. A special class of water-based muds use partially hydrolyzed polyacrylamide (PHPA) as an additive, to encapsulate drill solids or to extend bentonite clay in a low-solids mud.

**Saltwater systems.** Several mud systems are included in this classification. Saturated salt systems are used to drill salt formations. Lower levels are usually referred to as brackish or seawater systems. Saltwater muds are usually prepared from brackish water, seawater or produced water sources, and dry sodium chloride (or another salt, such as potassium chloride used for shale inhibition) is added. Various specialty products, such as attapulgite, carboxymethyl cellulose (CMC), starch and others, are used to increase viscosity for hole-cleaning properties and to reduce fluid loss.

## OIL-BASED MUDS (OBM)

Oil-based systems are used in various applications where fluid stability and inhibi-

tion are necessary, such as high-temperature wells, deep holes, and where sticking and hole stabilization are problems.

1. *Invert emulsion muds* are water-in-oil emulsions, typically with calcium chloride brine as the emulsified internal phase and oil as the continuous phase. They may contain as much as 50% brine in the liquid phase. Invert emulsion muds can be “conventional” with a highly stable emulsion or “relaxed” with lower emulsion stabilities and higher HPHT filtrates. The concentration of additives and brine content/salinity are varied to control rheological, filtration and emulsion stability. Oil-based mud additives include emulsifiers and wetting agents (commonly fatty acids and amine derivatives), amine-treated organic materials for filtration control, organoclays and polymers for viscosity, and lime for alkalinity.

2. *All-oil fluids* are formulated with only base oil as the liquid phase and are often used as coring fluids. Although these systems pick up water from the formation, no additional water or brine is added. All-oil systems require higher additional gelling agents for viscosity.

## COMPLETION FLUIDS

Solids-free and formulated with aqueous salts for density, these fluids can achieve a wide density range by incorporating the appropriate salt (halides, bromides and formates) without using conventional weighting materials. They are usually designed to match specific reservoir criteria, taking into account critical factors like equivalent static density (ESD), contamination risks and crystallization temperatures.

## HPHT SPECIALTY PRODUCTS

Specifically designed for high-pressure, high-temperature and hostile environments where conventional drilling fluids are impractical or uneconomical, they address safety and environmental compliance, lost circulation, decreased penetration rates, acid gases and determination of downhole pressure, while allowing for flexible tool and equipment selection.



## Abbreviations of company names

<b>AES</b> – AES Drilling Fluids LLC, Houston, TX, <a href="http://www.aesfluids.com">www.aesfluids.com</a>	<b>Deep South</b> – Deep South Chemical, Inc., Lafayette, LA, USA, <a href="http://www.deep-south-chemical.com">www.deep-south-chemical.com</a>	<b>Messina</b> – Messina, Inc., Dallas, TX, USA, <a href="http://www.MessinaChemicals.com">www.MessinaChemicals.com</a>
<b>AkzoNobel</b> – Akzo Nobel Functional Chemicals B.V., Arnhem, Netherlands, <a href="http://www.akzonobel.com/pa">www.akzonobel.com/pa</a>	<b>Dow</b> – Dow Oil and Gas, Houston, TX, USA, <a href="http://www.dowoilandgas.com">www.dowoilandgas.com</a>	<b>M-I SWACO</b> – M-I SWACO, a Schlumberger company, Houston, TX, USA, <a href="http://www.miswaco.com">www.miswaco.com</a>
<b>Alliance</b> – Alliance Drilling Fluids, LLC, Midland, TX, USA, <a href="http://www.alliancedf.com">www.alliancedf.com</a>	<b>Drill. Spec.</b> – Drilling Specialties, The Woodlands, TX, USA, <a href="http://www.cpchem.com/bl/drilling">www.cpchem.com/bl/drilling</a>	<b>Montello</b> – Montello, Inc., Tulsa, OK, USA, <a href="http://www.montelloinc.com">www.montelloinc.com</a>
<b>Alpine</b> – Alpine Specialty Chemicals, Houston, TX, USA, <a href="http://www.alpinemud.com">www.alpinemud.com</a>	<b>Drillchem</b> – Drillchem Drilling Solutions, Lafayette, LA, USA, <a href="http://www.drillchem.com">www.drillchem.com</a>	<b>Nalco</b> – Nalco Company Energy Chemicals, Sugar Land, TX, USA, <a href="http://www.nalco.com">www.nalco.com</a>
<b>Am. Gil.</b> – American Gilsonite Co., Bonanza, UT, USA, <a href="http://www.americangilsonite.com">www.americangilsonite.com</a>	<b>Drillsafe</b> – DrillSafe Janel Int., Ustron, Poland, <a href="http://www.drillsafe.com.pl">www.drillsafe.com.pl</a>	<b>Newpark</b> – Newpark Drilling Fluids, Houston, TX, USA, <a href="http://www.newparkdf.com">www.newparkdf.com</a>
<b>Anchor</b> – Anchor Drilling Fluids, Tulsa, OK, USA, <a href="http://www.anchorusa.com">www.anchorusa.com</a>	<b>DSC</b> – DSC Incorporated, The Woodlands, TX, USA, <a href="http://www.TORKease.com">www.TORKease.com</a>	<b>NOV</b> – NOV FluidControl, Houston, TX, USA, <a href="http://nov.com/FluidControl">nov.com/FluidControl</a>
<b>Aqua-Clear</b> – Aqua-Clear, Inc., Charleston, WV, USA, <a href="http://www.aquaclear-inc.com">www.aquaclear-inc.com</a>	<b>Ecofluids</b> – Ecofluids, Inc., Houston, TX, USA, <a href="http://www.ecofluids.net">www.ecofluids.net</a>	<b>Oleon</b> – Oleon, Oelegem, Belgium, <a href="http://www.oleon.com">www.oleon.com</a>
<b>Aquaness</b> – Aquaness Chemical, a Baker Hughes business unit, Sugar Land, TX, USA, <a href="http://www.bakerhughes.com">www.bakerhughes.com</a>	<b>Elementis</b> – Elementis Specialties, East Windsor, NJ, USA, <a href="http://www.elementis-specialties.com">www.elementis-specialties.com</a>	<b>Pacer</b> – Pacer Corporation, Custer, SD, USA, <a href="http://www.pacerminerals.com">www.pacerminerals.com</a>
<b>ASAP</b> – ASAP Fluids Pvt. Ltd, Mumbai, India, <a href="http://www.asapfluids.com">www.asapfluids.com</a>	<b>Elkem</b> – Elkem, Ltd., Kristiansand, Norway, <a href="http://www.wdp.elkem.com">www.wdp.elkem.com</a>	<b>PICO</b> – PICO DFT, part of PICO Energy Petroleum Integrated Services, Cairo, Egypt, <a href="http://www.picoenergy.com">www.picoenergy.com</a>
<b>Ashland</b> – Ashland Aqualon Functional Ingredients, a commercial unit of Ashland, Inc., Wilmington, DE, USA, <a href="http://www.aqualon.com">www.aqualon.com</a>	<b>EMEC</b> – Egyptian Mud Engineering & Chemicals Company, Cairo, Egypt, <a href="http://www.emec.com.eg">www.emec.com.eg</a>	<b>ProOne</b> – ProOne Energy, Houston, TX, USA, <a href="http://www.pro1energy.com">www.pro1energy.com</a>
<b>Ava</b> – Ava Drilling Fluids, S.p.A., Rome, Italy, <a href="http://www.avaspa.it">www.avaspa.it</a>	<b>Emery</b> – Emery Oleochemicals GmbH, Düsseldorf, Germany, <a href="http://www.emeryoleo.com">www.emeryoleo.com</a>	<b>Q'Max</b> – Q'Max America Inc., Benbrook, TX, <a href="http://www.qmaxsolutions.com">www.qmaxsolutions.com</a>
<b>Baroid</b> – Baroid, a division of Halliburton, Houston, TX, USA, <a href="http://www.halliburton.com/baroid">www.halliburton.com/baroid</a>	<b>Flotek</b> – Flotek Industries, Inc., Houston, TX, USA, <a href="http://www.flotekind.com">www.flotekind.com</a>	<b>Rapid</b> – Rapid Drilling Fluids, Lafayette, LA, USA, <a href="http://www.rapidenergyservices.com">www.rapidenergyservices.com</a>
<b>Barzaghi</b> – Barzaghi srl, Arluno, Italy, <a href="http://www.barzaghi.org">www.barzaghi.org</a>	<b>Forta</b> – Forta Corp., Grove City, PA, USA, <a href="http://www.super-sweep.com">www.super-sweep.com</a>	<b>RIG-CHEM</b> – RIG-CHEM, Houma, LA, USA, <a href="http://www.rigchem.com">www.rigchem.com</a>
<b>BASF</b> – BASF Global Oilfield Solutions, Houston, TX, USA, <a href="http://www.oilfield-solutions.basf.com">www.oilfield-solutions.basf.com</a>	<b>GEO</b> – Geo Drilling Fluids, Bakersfield, CA, USA, <a href="http://www.geodf.com">www.geodf.com</a>	<b>Roquette</b> – Roquette Frères, Lestrem, France, <a href="http://www.roquette.com">www.roquette.com</a>
<b>BCI Chemical</b> – BCI Chemical Corporation Sdn Bhd, Seri Kembangan, Malaysia, <a href="http://www.bcichemical.com.my">www.bcichemical.com.my</a>	<b>GPC</b> – Grain Processing Corp., Muscatine, IA, USA, <a href="http://www.grainprocessing.com">www.grainprocessing.com</a>	<b>Scomi</b> – Scomi Oiltools, Selanger, Malaysia, <a href="http://www.scomioiltools.com.my">www.scomioiltools.com.my</a>
<b>BCIDF</b> – Baker Chemicals, Inc., Houston, TX, USA, <a href="http://www.bcidf.com">www.bcidf.com</a>	<b>Gumpro</b> – Gumpro Drilling Fluids Pvt. Ltd., Mumbai, India, <a href="http://www.gumprodf.com">www.gumprodf.com</a>	<b>Shrieve</b> – Shrieve OFC, The Woodlands, TX, USA, <a href="http://www.shrieve.com">www.shrieve.com</a>
<b>BHI</b> – Baker Hughes Incorporated, Houston, TX, USA, <a href="http://www.bakerhughes.com">www.bakerhughes.com</a>	<b>Ibex</b> – Ibex Chemicals, Inc., Houston, TX, USA, <a href="http://www.ibexchemicals.com">www.ibexchemicals.com</a>	<b>Solazyme</b> – Solazyme, Inc., San Francisco, CA, USA, <a href="http://www.solazyme.com">www.solazyme.com</a>
<b>Black Earth</b> – Black Earth Humic LP, Alberta, Canada, <a href="http://www.blackearth.com">www.blackearth.com</a>	<b>Impact</b> – Impact Fluid Solutions, Houston, TX, USA, <a href="http://www.impact-es.com">www.impact-es.com</a>	<b>So. Clay</b> – Southern Clay Products, Gonzales, TX, USA, <a href="http://www.scpod.com">www.scpod.com</a>
<b>Boysenblue</b> – Boysenblue/Celtec International, Inc., Lafayette, LA, USA, <a href="http://www.boysenblue.com">www.boysenblue.com</a>	<b>Integrity</b> – Integrity Industries, Inc., Kingsville, TX, USA, <a href="http://www.integrityindustries.com">www.integrityindustries.com</a>	<b>Strata</b> – Strata Control Services, Inc., Crowley, LA, USA, <a href="http://www.stratacontrol.com">www.stratacontrol.com</a>
<b>Cabot</b> – Cabot Specialty Fluids, Aberdeen, UK, <a href="http://www.formatebrines.com">www.formatebrines.com</a>	<b>ISP</b> – International Specialty Products, Wayne, NJ, USA, <a href="http://www.ispenergy.com">www.ispenergy.com</a>	<b>Sun</b> – Sun Drilling Products, Belle Chasse, LA, USA, <a href="http://www.sundrilling.com">www.sundrilling.com</a>
<b>Cebo</b> – Cebo Holland B.V., Ijmuiden, Netherlands, <a href="http://www.ceboholland.com">www.ceboholland.com</a>	<b>Kelco</b> – Kelco Oilfield Group, a Huber Company, Houston, TX, USA, <a href="http://www.cpkelco.com">www.cpkelco.com</a>	<b>TBC</b> – TBC-Brinadd, Houston, TX, USA, <a href="http://www.tbc-brinadd.com">www.tbc-brinadd.com</a>
<b>Cesco</b> – Cesco Chemicals, Inc., Lafayette, LA, USA, <a href="http://www.cescochem.com">www.cescochem.com</a>	<b>Kemira</b> – Kemira Water Solutions, Kennesaw, GA, USA, <a href="http://www.kemira.com">www.kemira.com</a>	<b>Tetra</b> – Tetra Technologies, The Woodlands, TX, USA, <a href="http://www.tetrattec.com">www.tetrattec.com</a>
<b>Chemjet</b> – Chemjet Inc., Houston, TX, USA, <a href="http://www.chemjet.com">www.chemjet.com</a>	<b>Krishna</b> – Krishna Antioxidants, Mumbai, India, <a href="http://www.cristol.co.in">www.cristol.co.in</a>	<b>Tolsa</b> – Tolsa, S.A., Madrid, Spain, <a href="http://www.tolsa.com">www.tolsa.com</a>
<b>ChemSol</b> – ChemSol, LLC, Minnetonka, MN, USA, <a href="http://www.chemsolusa.com/drilling">www.chemsolusa.com/drilling</a>	<b>Lamberti</b> – Lamberti S.p.A., Gallarate, Italy, <a href="http://www.lamberti.com">www.lamberti.com</a>	<b>Turbo-Chem</b> – Turbo-Chem International, Inc., Lafayette, LA, USA, <a href="http://www.turbochem.com">www.turbochem.com</a>
<b>Chemstar</b> – Chemstar Products Co., Minneapolis, MN, USA, <a href="http://www.chemstar.com">www.chemstar.com</a>	<b>LCM</b> – Lost Circulation Management, Fulshear, TX, USA, <a href="http://www.lostcirculationmgmt.com">www.lostcirculationmgmt.com</a>	<b>Venture</b> – Venture Chemicals, Inc., Lafayette, LA, USA, <a href="http://www.venturechemicals.com">www.venturechemicals.com</a>
<b>Cinicola</b> – Eredi Dott. Settimio Cinicola Bentonite S.A.S., Milano, Italy, <a href="http://www.cinicola.net">www.cinicola.net</a>	<b>LCS</b> – Lost Circulation Specialists, Magnolia, TX, USA, <a href="http://www.magmafiber.com">www.magmafiber.com</a>	<b>Vertechs</b> – Vertechs Oil & Gas Technology Co., Ltd, Albuquerque, NM, USA, <a href="http://www.vertechs.com">www.vertechs.com</a>
<b>Clariant</b> – Clariant Corp., The Woodlands, TX, USA, <a href="http://www.clariantoil.com">www.clariantoil.com</a>	<b>Liquid Csg.</b> – Liquid Casing, Inc., Houston, TX, USA, <a href="http://www.liquidcasing.com">www.liquidcasing.com</a>	<b>ViChem</b> – ViChem Specialty Products, LLC, Conroe, TX, <a href="http://www.vichemllc.com">www.vichemllc.com</a>
<b>Coatex</b> – Coatex SAS, Genay, France, <a href="http://www.coatex.com">www.coatex.com</a>	<b>L-USA</b> – Lamberti USA, Hungerford, TX, USA, <a href="http://www.lambertiusa.com">www.lambertiusa.com</a>	<b>Weatherford</b> – Weatherford Drilling Fluids and Drilling Waste Management, Dubai, UAE, <a href="http://www.weatherford.com">www.weatherford.com</a>
<b>CorsiTech</b> – CorsiTech, Houston, TX, <a href="http://www.special-products.com">www.special-products.com</a>	<b>M&amp;D</b> – M&D Industries of Louisiana, Lafayette, LA, USA, <a href="http://www.ultrasealinc.com">www.ultrasealinc.com</a>	<b>Well Flow</b> – Well Flow International, LLC, Houston, TX, USA, <a href="http://www.well-flow.com">www.well-flow.com</a>
	<b>MASI</b> – MASI Technologies, LLC, Edmond, OK, USA, <a href="http://www.masitech.com">www.masitech.com</a>	<b>Wyo-Ben</b> – Wyo-Ben Corp., Billings, MT, USA, <a href="http://www.wyoben.com">www.wyoben.com</a>
	<b>Mayco</b> – Mayco-Wellchem, Inc., Houston, TX, USA, <a href="http://www.maycowellchem.com">www.maycowellchem.com</a>	

## RESERVOIR DRILL-IN FLUIDS (RDF)

These have the properties of a drilling fluid and a completion fluid and are designed to minimize formation damage when drilling a reservoir. Their primary attribute is the development of a filter cake that effectively prevents formation damage and is easily removed, with filtrate and filter cake being compatible with the completion process. They are usually composed of biopolymers and bridging materials.

## SYNTHETIC FLUIDS (SBM)

These are designed to mirror oil-based mud performance, without the environmental hazards. Primary synthetic fluids are esters, ethers and olefins. They can be discharged offshore without any detrimental effect on the environment.

## WELLBORE CLEAN-UP

These products are designed to remove mud and mud particles that are attached to the casing or become a part of the filter cake while drilling. They are incorporated into aqueous and non-aqueous spacers and cleaners to ensure smooth displacement, optimal contact times and reduced disposal costs.

## AIR, MIST, FOAM AND GAS

Four basic operations are included in this specialized category. These include: 1) *dry air drilling*, which involves injecting dry air or gas into the wellbore at rates capable of achieving annular velocities that will remove cuttings; 2) *mist drilling*, which involves injecting a foaming agent into the air stream that mixes with produced water and coats the cuttings to prevent mud rings, allowing drill solids to be removed; 3) *foam*, which uses surfactants and possibly clays or polymers to form a high carrying-capacity foam; and 4) *aerated fluids*, which rely on mud with injected air to remove drilled solids from the wellbore.

## FUNCTIONS OF ADDITIVES

The product function classifications are those generally accepted by the IADC Subcommittee on Drilling Fluids. Some additives have multiple uses, so a primary and two secondary functions are listed.

**Alkalinity/acidity control additives.** Products, used to control the degree of acidity or alkalinity of a fluid, include lime, caustic soda, soda ash and bicarbonate of soda, as well as other common acids and bases.

**Bactericides.** These are used to prevent bacterial degradation of natural organic additives, such as starch and xanthan gum.

**Calcium reducers.** Soda ash, bicarbonate of soda, caustic soda and certain polyphosphates are used to reduce calcium in seawater, treat cement contamination, and overcome the contaminating effects of anhydrite and gypsum, forms of calcium sulfate.

**Corrosion inhibitors.** These chemical products are used to control corrosion, neutralize hazardous acid gases and prevent scale. Common corrosion inhibitors are amine or organophosphate products, oxygen scavengers and other specially formulated chemicals.

**Defoamers.** Products are designed to reduce foaming action, particularly in brackish and saturated saltwater muds.

**Emulsifiers.** These products create a heterogeneous mixture (emulsion) of two insoluble liquids. They include fatty acids and amine-based chemicals for oil-based muds and detergents, soaps, organic acids and water-based surfactants for water-based muds. Products may be anionic (negatively charged), non-ionic (neutral) or cationic (positively charged).

**Filtrate reducers.** Bentonite clays, lignite, CMC, polyacrylate and pregelatinized starch all serve to decrease fluid loss, a measure of the tendency of the drilling fluid's liquid phase to pass through the filter cake into the formation.

**Flocculants.** These are used to increase viscosity for improved hole cleaning, to increase bentonite yield and to clarify or dewater low-solids fluids. Salt (or brine), hydrated lime, gypsum, soda ash, bicarbonate of soda, sodium tetraphosphate and acrylamide-based polymers may be used. They cause colloidal particles in suspension to group into bunches or "flocs," causing solids to settle out.

**Foaming agents.** Most often, these are chemicals that also act as surfactants to foam in the presence of water. These foamers permit air or gas drilling through water-bearing formations.

**Hydrate suppressants.** Salts and alcohol-based additives are used for hydrate suppression for use in deepwater, cold-water and riser environments.

**Lost-circulation materials.** A lost-circulation additive is used to plug the zone of loss back in the formation, away from the borehole face, so that subsequent operations will not result in additional drilling fluid losses. LCM is found in three forms:

fiber, flake and granular/chemical thickening agents, such as ground nut hulls or water-swellable, nonsoluble, crystalline polymers. In case of massive lost circulation, two or more of these materials and/or more specialized thickening materials may be needed.

**Lubricants/pipe-freeing agents.** Designed to reduce a drilling fluid's coefficient of friction, lubricants decrease torque and drag. Various oils, synthetic liquids, graphite, surfactants, glycols, glycerin and other chemicals are used for this purpose.

**Shale control inhibitors.** Sources of soluble calcium and potassium, as well as inorganic salts and organic compounds, provide shale control by reducing shale hydration. These products are used to prevent excessive wellbore enlargement and heaving or caving while drilling water-sensitive shales.

**Surface-active agents.** Surfactants, as they are called, reduce interfacial tension between contacting surfaces (water/oil, water/solid, water/air, etc.). These may be emulsifiers, demulsifiers, wetting agents, flocculants or deflocculants, depending on the surfaces involved.

**Temperature-stability agents.** These are products that increase the rheological and filtration stability of drilling fluids exposed to high temperatures in order to allow them to continue to perform their intended purpose under these conditions. Various chemicals are used, including amines, acrylic polymers, sulfonated polymers and co-polymers, as well as lignite, lignosulfonate and tannin-based additives.

**Thinners, dispersants.** These chemicals modify the relationship between viscosity and percentage of solids in a drilling mud. They may be used further to reduce gel strength, increase a fluid's "pumpability," etc. Tannins (quebracho), various polyphosphates, lignite and lignosulfonate materials function as thinners or as dispersants. A thinner functions as a deflocculant to reduce attraction (flocculation) of clay particles, which produces high viscosity and gel strengths.

**Viscosifiers.** Bentonite and attapulgite clays, high-molecular-weight polymers and biopolymers increase viscosity for better hole cleaning and suspension of solids.

**Weighting materials.** Barite, iron oxides and calcium carbonates, as well as salts, are used for density to control formation pressures, prevent formation caving and facilitate pulling dry pipe. **WO**

# World Oil's Fluid Systems

World Oil's Fluid Systems			Recommended for these systems							
			Water-based fluids					Oil-based	Synthetic-based	Air, mist, foam, gas
Available from:	Systems	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids			
AES	ABS 40	Invert synthetic based fluid system							X	X
AES	AES VERT	Diesel oil based invert fluid system							X	
AES	ENERREACH	A polymeric invert drilling fluid system							X	X
AES	ENERSEAL	Superior MMH Technology	X	X		X	X			
AES	ENERSEAL LITE	Proprietary High Performance WBM fluid System	X	X	X	X	X			
AES	POLYLITE PLUS	Inhibitive water based fluid system		X	X	X	X	X		
AES	PURESTAR	Synthetic Invert System without the salt content							X	X
Anchor	ANCO-LCP	HPWBM drilling fluid system	X	X	X	X	X	X		
Anchor	ANCO-MUL	Oil-based mud system							X	
Anchor	ANCO POLY MUL	Clay-Free Oil-based mud system							X	
Ava	AVA FLEXDRILL	Customized, high-performance inhibitive system	X			X	X	X		
Ava	AVA K142	Potassium acetate system	X		X	X	X			
Ava	AVA K157	Potassium formate system	X			X	X	X		
Ava	AVA KLM	Inhibitive system based on potassium, lime and AVALTD2000	X	X	X	X	X			
Ava	AVA LAO	Olefin-based system (LAO or IO)								X
Ava	AVA MMH	Mixed meta l hydroxide system for large diameter sections	X			X				
Ava	AVABIODRILL	Inhibitive polymer-based system	X			X	X	X		
Ava	AVABIOSINT	Ester-based IE system for environmentally sensitive areas								X
Ava	AVACAT	Inhibitive system cationic polymers	X			X	X	X		
Ava	AVACLAYBLOCK	Inhibitive system	X			X	X	X		
Ava	AVACORE	100% base oil coring fluid							X	X
Ava	AVAFUID	Lignosulfonate system		X						
Ava	AVAFULFLOW	Non-damaging drill-in fluid	X			X	X	X	X	
Ava	AVAGELTERM	Environmentally friendly system for HPHT (up to 230°C)		X						
Ava	AVAGLYCO	Cloud point glycol system	X			X	X	X		
Ava	AVAHISALT	Inhibitive system for gas hydrate suppression	X	X		X	X	X	X	
Ava	AVALIG/K	Potassium-based lignosulfonate system		X						
Ava	AVAPAK	Potassium-based system	X			X				
Ava	AVAPOLVIS	PHPA system	X			X	X	X		
Ava	AVAPOLYOIL	Inhibitive system based on polyols	X			X	X	X		
Ava	AVAPOLYSALT	System for salt saturated sections	X			X	X	X		
Ava	AVAPOLYSIL	Silicate- and potassium-based system	X			X	X	X		
Ava	AVAREX	Environmentally friendly system for HPHT (up to 230°C)		X						
Ava	AVASILX	Silicate-based system	X			X	X	X		
Ava	AVATRASFOAM	Stiff foam recycling system								X
Ava	AVOIL ULT	LT-IE oil-based system							X	
Ava	AVOIL ULT 50	50/50 IE for environmentally sensitive areas							X	
Ava	DYNAPLUG	Cross-linking system for lost circulation				X				
BHI	AQUA-DRILL	WBM system based on Cloud Point glycol chemistry for clay inhibition and improved lubricity	X							
BHI	BRIDGEFORM	Single sack wellbore strengthening system	X			X	X	X		
BHI	CARBO-DRILL	Traditional invert emulsion system using diesel or mineral oil							X	
BHI	CLAY-TROL	WBM system using a polyamine to control clay hydration and swelling	X	X	X	X	X	X	X	
BHI	DKD	WBM designed to minimize logistics and control shallow hazards when riserless drilling in deepwater				X				
BHI	LATIDRILL	HPWBM designed for the unconventional				X	X	X		
BHI	MAGMA-TEQ	Diesel or mineral oil invert emulsion system for HPHT applications								
BHI	MICRO-PRIME	High-efficiency wellbore cleaning spacers								
BHI	MICRO-WASH	Openhole remediation system								
BHI	MPRESS	Diesel invert emulsion system with high shear thinning and rapid set/easy break gel characteristics							X	
BHI	NEW-DRILL	WBM system using PHPA for encapsulation				X	X			
BHI	NEXT-DRILL	Mineral oil /synthetic invert emulsion system with high shear thinning and rapid set/ easy break gel characteristics							X	X
BHI	NSURE	Constant rheology invert system for offshore, deep water, and pressure sensitive applications								X
BHI	OMNIFLOW DIF	Emulsion drill in fluid							X	X
BHI	PERFFLOW CM	Custom mix of biopolymers and CaCO3 for specific reservoir conditions	X			X	X	X		
BHI	PERFORMAX	HPWBM designed to emulate performance of emulsion muds								
BHI	PYRO-DRILL	WBM for HPHT and geothermal wells								
BHI	RHEO-LOGIC	Constant rheology invert emulsion								X
BHI	SSDKD	WBM designed to minimize logistics and control shallow hazards when riserless drilling in deep water	X					X		
BHI	SYN-TEQ	GOM-compliant invert emulsion system using C16C19 IO								X
BHI	TERRA-MAX	High-performance water-based mud for onshore and inland water applications								
BHI	UNICAL	Conventional WBM system run with lignosulfonate as a primary component	X							
Baroid	ACCOLADE	High Performance synthetic invert emulsion drilling fluid with ester								X
Baroid	BARADRILL-N	RDF containing sized calcium carbonate	X			X	X	X		
Baroid	BaraDrilN X	HPHT water-based RDF								
Baroid	BARA-PERFLUID	Pill for over-balanced perforating								
Baroid	BARASILC	Liquid silicate-based drilling fluid	X					X		
Baroid	BaraECD	Low-ECD invert emulsion drilling fluid, reservoir drilling fluid, and screen deployment fluid							X	X
Baroid	BaraNthance	Water-Based drilling fluid system for heavy oil	X			X	X	X		
Baroid	BaraPure	Salt-free High Performance invert emulsion drilling fluid							X	X
Baroid	BaraXtreme	High Performance HPHT water-based drilling fluid system	X			X	X	X		
Baroid	BAROID 100	All oil or all synthetic-based drilling fluid							X	X
Baroid	BOREMAX	HPWB freshwater drilling fluid	X			X	X	X		
Baroid	COREDRIIL-N	All oil or synthetic RDF and coring fluid								
Baroid	CRYSTAL-DRIL	Clear water drilling system	X			X	X	X		
Baroid	DRIL-N STIM	RDF containing additive to improve reservoir producibility	X			X	X	X		
Baroid	ENCORE	High Performance synthetic invert emulsion drilling fluid								X

Available from:	Systems	Description of material	Recommended for these systems					
			Water-based fluids					Air, mist, foam, gas
			Non-dispersed Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	
							Oil-based	Synthetic-based
Baroid	ENVIROMUL	Mineral oil-based invert emulsion fluid					X	
Baroid	FLEX-PLUG	MLCM mud-activated polymer pill						
Baroid	FUSE-IT	MLCM polymeric sealant						
Baroid	GEM	Polyglycol enhanced water-based drilling fluid	X		X	X	X	
Baroid	HYDRO-GUARD	HPWB deepwater/offshore drilling fluid	X		X	X	X	
Baroid	HYDRO-PLUG	MLCM blended fiber/particle/polymer pill						
Baroid	INNOVERT	High Performance mineral oil invert emulsion drilling fluid						X
Baroid	INTEGRATE	High Performance diesel oil invert emulsion drilling fluid						X
Baroid	INVERMUL	Diesel oil-based invert emulsion fluid						X
Baroid	K-SAFE	HPWB highly-inhibitive, clay-free, seawater-based drilling fluid	X		X	X		
Baroid	N-FLOW	RDF containing filter cake breakers	X		X	X	X	X
Baroid	N-SOLATE	Low thermal conductivity water-based insulating packer fluid; 275, 400 and 600 types						
Baroid	PERFORMADRILL	HPWB drilling fluid	X		X	X	X	
Baroid	PETROFREE	Ester-based invert emulsion fluid						X
Baroid	PIPE GUARD	Gelled invert emulsion fluid for pipe crossings					X	X
Baroid	POLYNOX	Lime-based lignosulfonate drilling fluid	X	X				
Baroid	QUICKDRILL-N	Solids-free, modified biopolymer RDF	X		X	X		
Baroid	RISER-VIS	Riserless fluid for deepwater applications						
Baroid	SHALEDRIIL	Water-based systems specifically for shale gas zones	X	X		X	X	
Baroid	SHEARDRIIL-N	Solids-free, optimized vis. RDF	X		X	X		
Baroid	SOLUDRIIL-N	RDF containing sized salt	X		X	X	X	
Baroid	SUPERSATURATED RISER-VIS	Riserless fluid supersaturated with salt for deepwater applications						
Baroid	THERMA-DRILL	HPHT water-based drilling fluid system	X		X	X		
Baroid	THURO-FORCE OS	WBC high density displacement spacer for OBM/SBM						X
Baroid	THURO-FORCE W	WBC high density displacement spacer for WBM	X	X	X	X	X	
Baroid	THURO-KLEAN OS	WBC spacer for removing OBM/SBM coating						X
Baroid	THURO-KLEAN W	WBC spacer for removing WBM coating	X	X	X	X	X	
Baroid	THURO-SCRUB OS	WBC blended spacer for removing OBM/SBM coating						X
Baroid	THURO-SCRUB W	WBC alkaline spacer for removing WBM coating	X	X	X	X	X	X
Baroid	THURO-SWEEP M	WBC high viscosity displacement spacer	X	X	X	X	X	X
Baroid	THURO-THIN OS	WBC OBM/SBM thinning and dispersing spacer						X
Baroid	THURO-THIN W	WBC WBM thinning and dispersing spacer	X	X	X	X	X	
Baroid	XP-07	Linear alkane-based invert emulsion fluid						X
Drillchem	DRILL-SERGEANT	One sack HPWB system	X	X	X	X	X	
Drillchem	DRILL-SGT	Shale and gumbo treatment	X	X	X	X	X	
Drillchem	POLY-K PSD	Proprietary Inhibitive WBM	X	X	X	X	X	
Ecofluids	ECO-BASE	Linear Paraffin based system						X
Ecofluids	ECO DRILL FLO	Formate viscoelastic system					X	
Ecofluids	ECO DRILL HP	Formate high-performance system				X		
Ecofluids	ECO FOAM	Nitrogenated foam system						X
Ecofluids	ECO HIB FLO	KCl viscoelastic system					X	
Ecofluids	ECO HIB HP	KCl high-performance system				X		
Ecofluids	ECO HIB HT	HPHT water-based system				X		
Ecofluids	ECO SWS	Salts-based system					X	
Ecofluids	ECOMUL	Oil-based system						X
Ecofluids	ECOMUL 100	100% oil system						X
Ecofluids	ECOMUL SYN	Synthetic-based system						X
Ecofluids	ECOTHERM	HPHT water-based system				X		
Ecofluids	KSUB	KCL substitute system					X	
Ecofluids	SGF	Self generating foam system						X
Ecofluids	STRATADRILL	Amine-based system		X				
GEO	POLYTEK	High Performance Water Base Mud Additive	X		X	X		
GEO	PetroDrill	Oil Based Mud Systems						X
Messina	DRILL-N-PAY	Family of drill-in fluids	X		X	X	X	X
Messina	KLEEN-COMPLETE	Non-damaging completion fluid system, CF	X		X	X	X	
Messina	KLEEN-DRILL	Calcium carbonate-based drill-in fluid	X		X	X	X	
Messina	KLEEN-MUL	Low toxicity and synthetic (SBM) invert system						X
Messina	KLEEN-SAL	Sized salt-based drill-in fluid	X		X	X	X	
Messina	OILMUL	Diesel-based invert drilling system						X
Messina	POLYTHERM	Versatile, HT WBM drilling system	X		X	X	X	
Messina	REDI-COAT	Highly inhibitive system for shale stabilization	X		X	X	X	
M-I SWACO	BREAKDOWN	Enzyme/chelant-based breaker system			X			
M-I SWACO	BREAKDOWN HD	Enzyme/chelant-based breaker system on water-based filter cakes for high-density fluids			X			
M-I SWACO	BREAKDOWN 7	Oil-based breaker / gravel packing carrier fluid system			X			
M-I SWACO	BREAKFREE	Enzyme-based breaker system			X			
M-I SWACO	BREAKLOOSE	Oxidizer-base system			X			
M-I SWACO	BREAKOUT	Activator, cleanup system			X			
M-I SWACO	CLEANPERF OB	Oil-based perforating system						X
M-I SWACO	CLEANPERF WB	Water-based perforating system				X	X	X
M-I SWACO	DIPRO	Biopolymer-free divalent brine RDF system with easy cleanup				X	X	
M-I SWACO	DRILPLEX	Diverse mixed metal oxide, WB drilling / RDF fluid, ideal as milling fluid, deepwater applications, CT	X		X	X		
M-I SWACO	DRILPLEX AR PLUS	Enhanced mixed metal oxide-based drilling fluid	X		X	X		
M-I SWACO	DURATHERM	Low-colloid, contaminant-resistant system for high-temp. drilling					X	
M-I SWACO	ECOGREEN	Ester-based, biodegradable system for environmentally sensitive areas						X
M-I SWACO	ENVIROTERM NT	Chrome-free, environmentally advanced system for high-temp. drilling	X					
M-I SWACO	ENVIROVERT	Chloride-free OBM with advantages of a conventional invert with lower disposal costs						X



# World Oil's Fluid Systems

Available from:	Systems	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic	Air, mist, foam, gas
M-I SWACO	FAZE-AWAY	Delayed invert emulsion-based breaker system for FAZEPRO filter cakes							X		
M-I SWACO	FAZEBREAK	Chelant-based breaker system for dispersion of residual filtercakes formed by FAZEPRO RDF system						X			
M-I SWACO	FAZECLEAN	Acid-based breaker system for FAZEPRO filter cakes							X		
M-I SWACO	FAZE-OUT	Delayed water-based breaker system for FAZEPRO filter cakes							X		
M-I SWACO	FAZEPRO	Reversible invert emulsion fluid, converts between oil and water wet for filtercake and WBC							X		
M-I SWACO	FLODENSE AP	Fluid system for remediation of casing pressure				X					
M-I SWACO	FLOPRO CT	Polymer water-based system specifically formulated for coiled tubing operations				X					
M-I SWACO	FLOPRO NT	Polymer carbonate reservoir drill-in fluid					X				
M-I SWACO	FLOPRO SF	Solids-free, polymer drill-in fluid, suited for CT drilling applications					X				
M-I SWACO	FLOTHRU	Water-based RDF that incorporates organophilic filtercake system				X					
M-I SWACO	GLYDRIL	HP env. polyglycol system for shale control, ER deepwater and subsalt drilling	X	X							
M-I SWACO	I-BOSS	Integrated Borehole Strengthening suite line of products	X	X	X	X	X	X	X	X	
M-I SWACO	ISOTHERM	Oil-based insulated packer fluid							X		
M-I SWACO	KLA-SHIELD	Inhibitive dispersed WBM for land use		X							
M-I SWACO	K-MAG	Potassium-based system for drilling troublesome shales	X								
M-I SWACO	MEGADRIL	Single-emulsifier OBM-diesel base for ambient to HPHT applications							X		
M-I SWACO	MEGADRIL P	Single-emulsifier paraffin-based fluid for ambient to HPHT applications								X	
M-I SWACO	MEGADRIL M	Single-emulsifier mineral-based fluid for ambient to HPHT applications							X		
M-I SWACO	NOVAPLUS	Low-viscosity, internal-olefin-based synthetic fluid for deep-water drilling and environmental regs							X		
M-I SWACO	NOVATEC	Ultra-low-viscosity, LAO-based synthetic fluid system suited for deepwater drilling								X	
M-I SWACO	PARADRIL	Paraffin-based system engineered as an alternative to conventional or mineral oil-based systems								X	
M-I SWACO	PARALAND	Paraffin-based drilling fluid designed for optimized land-based disposal of cuttings								X	
M-I SWACO	PARAPRO	Paraffin-based reservoir drill-in fluid								X	
M-I SWACO	PARATHERM	Paraffin-based high-temp., anti-sag drilling fluid								X	
M-I SWACO	PERF-N-PEEL	WBM fluid loss/damage control system for perforated completions				X	X	X			
M-I SWACO	POLY-PLUS	Polymer-based, PHPA system for improved cuttings encapsulation and shale stabilization	X			X	X	X			
M-I SWACO	POWERPRO	Polymer water-based system for coiled tubing operations designed to reduce CT pressures	X			X	X				
M-I SWACO	RHADIANT	Synthetic-based system for extreme to ultra HPHT applications								X	
M-I SWACO	RHELIANT	Flat-rheology synthetic fluid especially suited for deepwater drilling and cold environments								X	
M-I SWACO	RHELIANT D	Flat-rheology oil-based fluid especially suited for deepwater drilling and cold environments								X	
M-I SWACO	RHELIANT M	Flat-rheology mineral oil-based fluid especially suited for deepwater drilling and cold environments								X	
M-I SWACO	RHELIANT P	Flat-rheology paraffin-based fluid especially suited for deep-water drilling and cold environments									X
M-I SWACO	RHELIANT PLUS	Flat-rheology, low gel strengths and low plastic viscosities synthetic fluid especially suited for deepwater drilling and cold environments									X
M-I SWACO	RISERFAST	System for use in riserless sections of deepwater wells	X								
M-I SWACO	SAFE-LINK 110	Completion fluid pill built with 11.0 lb/gal CaCl2							X		
M-I SWACO	SAFE-LINK 140	Completion fluid built with 14.0 lb/gal CaBr2							X		
M-I SWACO	SAFETHERM	WB or water-miscible packer fluid customized for deepwater and permafrost applications				X					
M-I SWACO	SAGDRIL	Tar-sands drilling fluid				X	X				
M-I SWACO	SEAL-N-PEEL	Fluid loss control pill, as contingency for fluid loss control fluid to seal inside production screens				X					
M-I SWACO	SILDRIL	Silicate-based system for drilling water-sensitive shales	X								
M-I SWACO	TRUDRIL	All oil-based system designed for low-density drilling conditions								X	
M-I SWACO	ULTRADRIL	High-performance water-based drilling fluid	X			X					
M-I SWACO	VERSACLEAN	Mineral oil-based system for areas where diesel is prohibited								X	
M-I SWACO	VERSACLEAN MKII	Variant of VERSACLEAN system								X	
M-I SWACO	VERSADRIL	Diesel oil-based system for wellbore stability, contamination resistance and solids tolerance								X	
M-I SWACO	VERSA-OUT	Delayed water-based breaker system for VERSAPRO system								X	
M-I SWACO	VERSAPRO	Invert emulsion reservoir drill-in fluid								X	
M-I SWACO	VERSAPRO LS	Low-solids invert emulsion reservoir drill-in fluid								X	
M-I SWACO	VERSATHERM	Mineral oil-based high-temp. anti-sag drilling fluid								X	
M-I SWACO	VERSAVERT	Ultra-low toxicity mineral oil-based drilling fluid system								X	
M-I SWACO	VERSA-WAY	Delayed invert emulsion breaker system for VERSAPRO system with greater delay and higher thermal stability							X		
M-I SWACO	OB WARP	Non aqueous-based system for ECD management using chemically treated micronized barite wet-milled in base oil/synthetic								X	X
M-I SWACO	WB WARP	Water-based system for ECD management using chemically treated micronized barite wet-milled in NaCl brine				X					
M-I SWACO	OB CC WARP	Non-aqueous-based system for ECD management using chemically treated micronized calcium carbonate wet-milled in base oil/synthetic								X	X
M-I SWACO	WB CC WARP	Water-based system for ECD management using chemically treated micronized calcium carbonate wet-milled in NaCl brine				X					
M-I SWACO	WARP 4200	WARP system currently used in GoM, but available for use outside GoM								X	X
M-I SWACO	OB WARP PB	Paraffin-based system using WARP technology									X
M-I SWACO	OB WARP SB	Synthetic-based system using WARP technology									X
Newpark	KRONOS	Synthetic-based system									X
Newpark	DEEPRILL	Highly inhibitive HPWB system	X	X	X	X	X	X			
Newpark	EVOLUTION	Clay-free, highly lubricious, HPWB system for fresh and salt water applications including HPHT	X	X	X	X	X	X			
Newpark	FLEXDRILL	Versatile HPWB system	X	X	X	X	X	X			
Newpark	RESOLUTION	Reservoir drill-in fluid	X	X	X	X	X	X			
Newpark	OPTIDRILL	Invert emulsion system									X

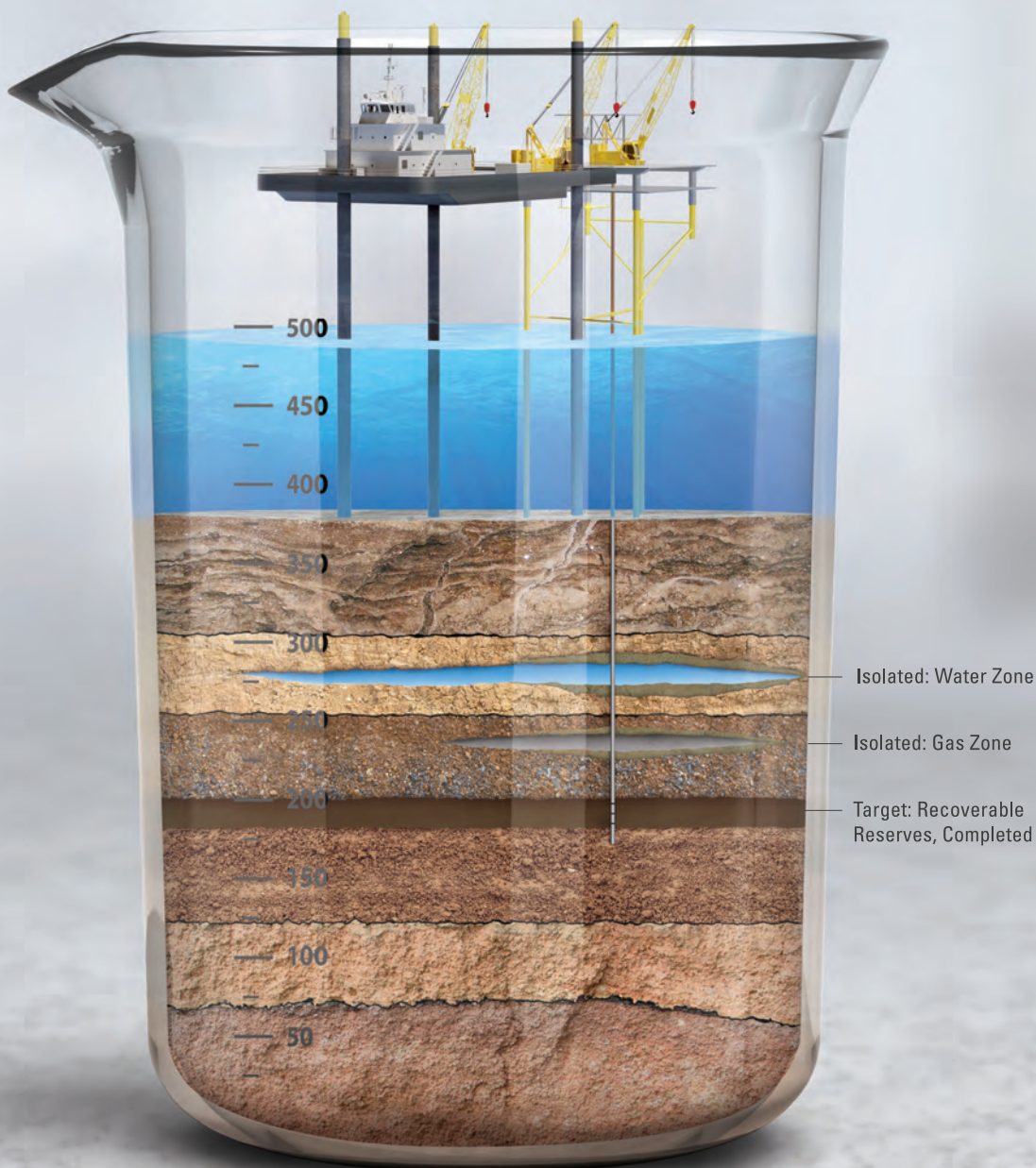
Available from:	Systems	Description of material	Non-dispersed	Dispersed	Calcium	Polymer	Low Solids	Saturated Salt	Oil-based	Synthetic	Air
Newpark	OPTIPHASE	Salt-free oil-based system							X		
Newpark	GAGEDRILL	MMO system	X								
NOV	DFX	High performance aqueous fluid for offshore drilling	X	X	X	X	X	X			
NOV	AQUA-DREX	Low pH Polymer Dispersed system	X	X			X				
NOV	POLYTRAXX	High performance aqueous fluid for onshore drilling	X	X		X	X				
NOV	TERRAFORM	Formate drilling fluid	X			X	X				
NOV	VAPR	Cloud point glycol drilling fluid	X								
NOV	ECO-SYN Terra	Synthetic oil-based invert emulsion fluids for onshore drilling								X	
NOV	ECO-SYN Wave	Synthetic oil-based invert emulsion fluids for offshore drilling								X	
NOV	ECO-SYN Stable	Synthetic oil-based invert emulsion flat rheology fluids for offshore drilling								X	
NOV	SO/L0	Organophilic clay-free, low solids, diesel-based invert emulsion drilling fluids								X	
NOV	PETROS	Diesel-based invert emulsion drilling fluid							X		
ProOne	Bio-Stable	Lubricant 100% Biodegradable	XX	X		X	XX	X	X	X	X
ProOne	Bio-Blend	Lubricant 100% Biodegradable	XX	X		X	XX	X	X	X	X
ProOne	Nitro	Lubricant 100% Biodegradable	XX	X		X	XX	X	X	X	X
ProOne	CoilPro Pipe on Pipe	POP Coil Tubing Work Biodegradable	XX	X		X	XX	X	X	X	X
ProOne	BioFrac FR	Friction Reducer Frac Jobs Biodegradable	XX	X		X	XX	X	X	X	X
Q'Max	Carboblridge	Clay Free Bridging Drilling Fluid									
Q'Max	Carboblridge HT	High Temperature Clay Free Bridging Drilling Fluid									
Q'Max	CBMax 100	Proprietary CBM drilling system									
Q'Max	CBMax 200	Proprietary CBM drilling system									
Q'Max	FilterVis	Cost effective alternative to Gel Chem Mud									
Q'Max	HybriDrill EDE	Encapsulating Direct Emulsion System for SAGD									
Q'Max	HybriDrill ES	Encapsulating System for SAGD drilling									
Q'Max	HybriDrill HTHD	High temperature high density fluid for infill drilling SAGD									
Q'Max	HybriDrill HTLD	High temperature low density fluid for infill drilling SAGD									
Q'Max	MAXDRILL	Inhibitive Polymer Drilling Fluid									
Q'Max	Miconaire	Enhance foam / low density fluid									
Q'Max	Polytar	Anti-accretion system designed for SAGD Drilling									
Q'Max	Q'Core	Water Based System for coring									
Q'Max	QM-12	Potassium Silicate drilling fluid									
Q'Max	QM-P	Potassium silicate inhibitive drilling fluid									
Q'Max	QM-S	Sodium silicate inhibitive drilling fluid									
Q'Max	Q'MaxDrill	Amine-based inhibitive drilling fluid									
Q'Max	Q'Vert 1400	Synthetic olefin based fluid									
Q'Max	Q'Vert 1500	Synthetic olefin based fluid									
Q'Max	Q'Vert 822	Low BTEX OBM									
Q'Max	Q'Vert HT40	Low toxicity oil based fluid									
Q'Max	Q'Temp	HTHP Water Based Fluid									
Q'Max	Q'Temp X	HTHP Inhibitive Water Based Fluid									
Q'Max	RapiDrill SG	HP WBM for Extended Reach Horizontal Wells in Shale Gas									
Scomi	CONFI-DEEP	Flat rheology deepwater fluid								X	X
Scomi	CONFI-DENSE	HTHP invert emulsion								X	X
Scomi	CONFI-DRILL	NAF invert emulsion								X	X
Scomi	EXTRA-VERT	Ester based invert emulsion								X	
Scomi	HYDRO-FOIL	Potassium/PHPA system	X			X	X	X			
Scomi	HYDRO-FOIL GEN 1	Glycol WBM for shale stability	X			X	X	X			
Scomi	HYDRO-FOIL S8	Silicate	X			X	X	X			
Scomi	HYDRO-THERM	High temperature WBM	X			X	X	X			
Scomi	HyPR-DRILL	HPWBM System	X			X	X	X			
Scomi	HyPR-FOIL S8	Chloride free silicate WBM	X			X	X				
Scomi	OPTA-FLO	Polymer and CaCO3 drill-in fluid	X			X	X	X			
Scomi	OPTA-VERT	NAF drill-in fluid								X	X
Scomi	OPTA-VERT 100	NAF water free system								X	X
Scomi	RHEO-PLEX	Mixed metal oxide system	X			X	X				
Sun	DRILLCON C	Hydratable shale control	X	X	X	X	X	X			
Sun	EZE-SLIDE	Liquid metal/metal lubricant	X	X	X	X	X	X			X
Sun	EZE-SLIDE D	Land use liquid lubricant	X	X	X	X	X	X			X
Sun	SUN SWEEP	Mech. hole cleaning agent	X	X	X	X	X	X	X	X	X
Weatherford	DuraFoam	Water Based Recyclable Foams									
Weatherford	EnviroFoam	Completely biodegradable									
Weatherford	KleanFoam	Water Based Recyclable Foams									
Weatherford	OleoFoam EF	For HF 100								X	
Weatherford	OleoFoam HT	Foamer for crude, diesel or synthetic								X	X
Weatherford	OleoFoam C	Foamer for condensate								X	
Weatherford	TransFoam	Water Based Recyclable Foams									
Weatherford	WEL-DRILL	Potassium/PHPA system	X			X	X	X			
Weatherford	WEL-DRILL CPG	Glycol WBM for shale stability	X			X	X				
Weatherford	WEL-DRILL F	Formate-based systems	X			X	X				
Weatherford	WEL-DRILL HP	HPWB system	X	X		X	X	X			
Weatherford	WEL-DRILL MMO	Mixed metal oxide system	X			X	X				
Weatherford	WEL-DRILL PLUS	High temp. WBM	X			X	X	X			
Weatherford	WEL-DRILL RDF	Polymer and CaCO3 drill-in fluid	X			X	X	X			
Weatherford	WEL-DRILL S	Silicate	X			X	X				
Weatherford	WEL-VERT	NAF invert emulsion - synthetic-based								X	X
Weatherford	WEL-VERT D	NAF invert emulsion - diesel-based								X	X
Weatherford	WEL-VERT FR	Flat rheology NAF								X	X
Weatherford	WEL-VERT PLUS	HPHT invert emulsion								X	X
Weatherford	WEL-VERT RDF	NAF invert emulsion - RDF								X	X

# ZONAL RECOMPLETION

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**M&D INDUSTRIES**  
OF LOUISIANA



TE = Temperature stability agents  
TH = Thinners, dispersants  
V = Viscosifiers  
W = Weighting materials  
WBC = Wellbore cleanout  
WBM = Water-based mud

High temperature	P	= Pipe-freeing agents	TE	= Temperature stability agents
Drilling fluid, water-based	RDF	= Drill-in fluid	TH	= Thinners, dispersants
Essential	SB	= Synthetic-based	V	= Viscosifiers
Drilling additives	SH	= Shale-control agents	W	= Weighting materials
	SU	= Surface-active agents	WBC	= Wellbore cleaner
Drilling circulation material	T	= Tracers	WBM	= Water-based mud

# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based			
								Air, mist, foam, gas			
Anchor	ANCO THIN L	Liquid polymeric thinner	X	X	X	X	X		TH	FR	
Anchor	ANCO TORKBUSTER PLUS	Ester-based lubricant for water-based mud	X	X	X	X	X		LU	SH	
Anchor	ANCO TROL	Gilsonite fluid loss control agent						X X	FR	TE	LO
Anchor	ANCO WASH	Surfactant blend for rig cleaning		X				X X	SU	B	
Anchor	ANCO WT-10	Bactericide	X	X	X	X	X		S	V	FR
Anchor	ANCO ZAN	Xanthan gum polymer	X	X	X	X	X		B	FR	
Anchor	FOAM TREAT	Surface-active shale stabilizer for air, mist and foam						X	SH	FO	SU
Aqua-Clear	AIRFOAM AP-50	Freshwater, mild saltwater foaming agent							X	FO	
Aqua-Clear	AIRFOAM B	Saltwater foaming agent							X	FO	
Aqua-Clear	AIRFOAM HD	Oil foaming agent							X	FO	
Aquaness	AQUAMUL 854	Emulsifier and wetting agent						X	E	FR	SU
Aquaness	AQUET 943C	Amphoteric foaming agent							X	FO	
Aquaness	AQUET TD500K	Anionic foaming agent							X	FO	
Aquaness	ARBREAK Series	Demulsifier									
Aquaness	ARCOR Series	Corrosion inhibitor							CO		
Aquaness	ARDRIL CLA-BAN	Cationic Polyamine Shale Stabilizer				X	X		X	SH	FL
Aquaness	ARFLOW Series	Paraffin products									
Aquaness	ARKLEAR Series	Water clarifier and reverse demulsifier				X	X		X	SH	FL
Aquaness	ARLOX HS700	Hydrogen sulphide scavenger	X	X	X	X	X		CO		
Aquaness	ARQUEST Series	Scale inhibitors									
Aquaness	ARSERSE 9471	Dispersant						X	CO	CF	
Aquaness	ARSURF Series	Surfactants							SU		
Aquaness	CRO80671	Filming amine corrosion inhibitor	X	X	X	X	X		X	CO	
Aquaness	CROAK50	Corrosion inhibitor							CO		
Aquaness	CRONOX Series	Corrosion inhibitors/intensifiers							CO		
Aquaness	CRW-132	Packer fluid corrosion inhibitor			X	X	X		X	CO	
Aquaness	CRW80669	Corrosion inhibitor	X					X	CO	CF	
Aquaness	DFW80521	Defoamer	X	X	X	X	X		D		
Aquaness	DRILLAD 100	Defoamer	X	X	X	X	X		D	CF	
Aquaness	DRILLAD 101	Lubricant for water-based mud	X	X	X	X	X		LU		
Aquaness	DRILLAD 103	Spotting fluid additive	X	X	X	X	X		P		
Aquaness	DRILLAD 104	Spotting fluid additive	X	X	X	X	X		P		
Aquaness	DRILLAD 105	Lubricant for water-based mud	X	X	X	X	X		LU	CF	
Aquaness	DRILLAD 106	Brine lubricant	X	X	X	X	X		LU	CF	
Aquaness	DRILLAD 108	Drilling fluid detergent	X	X	X	X	X	X X	SU	CF	
Aquaness	DRILLAD 201	Completion brine non-emulsifier					X		SU	CF	
Aquaness	DRILLAD 2903	High temp. emulsifier						X	E	FR	TE
Aquaness	DRILLAD 600	Rheology modifier						X X	V		
Aquaness	DRILLAD 701	Concentrated dispersant						X X	TH		
Aquaness	DRILLAD 900	Fluid loss control additive						X X	FR	E	TE
Aquaness	KD-40	Corrosion inhibitor	X	X	X	X	X		X	CO	
Aquaness	KD-700	Corrosion Inhibitor	X	X	X	X	X		X	CO	
Aquaness	KD-740	Corrosion inhibitor	X	X	X	X	X		X	CO	
Aquaness	MAGNACIDE 575	Biocide	X	X	X	X	X		B		
Aquaness	MAGNACIDE 575S	Biocide	X	X	X	X	X		B		
Aquaness	OSW80490	Oxygen scavenger	X	X	X	X	X		CO	CF	
Aquaness	PETROSWEET HSW700	Hydrogen Sulphide Scavenger	X	X	X	X	X		CO		
Aquaness	PETROSWEET HSW82112	Hydrogen Sulphide Scavenger	X	X	X	X	X		CO	CF	
Aquaness	SCW83263	Completion brine scale inhibitor					X		CO	CF	
Aquaness	TD500K	Anionic Foaming Agent						X	FO		
Aquaness	X-CIDE 102W	Winterized aldehyde-based biocide	X	X	X	X	X		X	B	
Aquaness	X-CIDE 207	Solid biocide	X	X	X	X	X		X	B	SH
Aquaness	X-CIDE 575S	Anionic solid biocide	X	X	X	X	X		X	B	LU
Aquaness	X-CIDE 80102	Aldehyde based biocide	X	X	X	X	X		X	B	SH
Aquaness	X-CIDE 80207	Nonionic solid biocide	X	X	X	X	X		X	B	CF
ASAP	ASAP - R-VIS	Solid Free Viscosifier							RDF	V	
ASAP	ASAP - R- STARCH	Modified Starch							RDF	FR	
ASAP	ASAP - R-WHITE	Sized Ground Marble							RDF	LO	
ASAP	ASAP - R- LUBE	Non Damaging Lubricant							RDF	LO	
ASAP	ASAP - R- BUFFER	pH Buffering Agent							RDF	A	
Ashland	AQUAFLO HV	High viscosity standard polyanionic cellulose	X	X	X	X			X	FR	V SH
Ashland	AQUAFLO LV	Low viscosity standard polyanionic cellulose	X	X	X	X			X	FR	SH SH
Ashland	AQUALON AQU D-3536P	Low MW anionic cellulosic polymer	X	X	X	X			TH	FR	SH
Ashland	AQUALON AQU D-4022	Thermally stable thickener for potassium formate brines			X	X	X		X	V	RDF LU
Ashland	AQUALON AQU D-4423	High solids, low MW anionic cellulosic suspension	X	X	X	X			TH	FR	SH
Ashland	AQUALON AQU D-4754	High viscosity dispersible polyanionic cellulose	X	X	X	X			X	FR	V LU
Ashland	AQUAPAC LIQUID	Eco-friendly anhydrous suspension Aquapac polyanionic cellulose	X	X	X	X			X	FR	V SH
Ashland	AQUAPAC LV	Low viscosity premium polyanionic cellulose	X	X	X	X			X	FR	SH SH
Ashland	AQUAPAC REGULAR	High viscosity premium polyanionic cellulose	X	X	X	X			X	FR	V SH
Ashland	AQUAPAC ULV	Ultra-low viscosity premium polyanionic cellulose	X	X	X	X			X	FR	SH SH
Ashland	ECODURA CRA 3536	High solids, low Mw anionic cellulosic solution	X	X	X	X			TH	FR	SH
Ashland	ECODURA FLA 3962	PLONOR aqueous suspension of Natrosol 250 LR		X	X	X			X	FR	RDF SH
Ashland	ECODURA FLA 3962P	PLONOR suspendable powders of Natrosol 250 LR		X	X	X			X	FR	RDF CF
Ashland	ECODURA FLA 4053	PLONOR aqueous suspension of Natrosol 250 JR		X	X	X			X	FR	RDF WBM
Ashland	ECODURA FLA 4451	PLONOR aqueous suspension of Natrosol 250LR		X	X	X			X	FR	RDF WBM
Ashland	ECODURA FLA 4641	PLONOR aqueous suspension of Natrosol 180GXR		X	X	X			X	FR	RDF WBM

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
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**W** = Weighting materials  
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**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems							Product Function			
			Non-dispersed	Water-based fluids				Oil-based	Synthetic-based	Air mist foam, gas	Primary	Secondary	Secondary
				Dispersed	Calcium-treated	Polymer	Low solids						
Ashland	ECODURA TA 4283	PLONOR aqueous suspension of Natrosol 210 HHX		X	X		X		X	V	FR	WBM	
Ashland	GALACTASOL 251	High viscosity straight guar	X	X	X	X	X		X	V	FR	WBM	
Ashland	GALACTASOL 252	Straight guar	X	X	X	X		X	X	V	FR	WBM	
Ashland	GALACTASOL 267	Diesel slurriable guar	X	X	X	X	X		X	V	FR	WBM	
Ashland	GALACTASOL 271	Self-hydrating dispersible straight guar	X	X	X	X		X	X	V	FR	CF	
Ashland	GALACTASOL 283	Fast hydrating high viscosity guar	X	X	X	X	X		X	V	FR	CF	
Ashland	GALACTASOL 284	Diesel slurriable fast hydrating high viscosity guar	X	X	X	X	X		X	V	FR	CF	
Ashland	GALACTASOL 467	Diesel slurriable hydroxypropyl guar	X	X	X	X	X		X	V	FR	SH	
Ashland	GALACTASOL 474	High viscosity hydroxypropyl guar		X	X	X		X	X	V	FR	SH	
Ashland	GALACTASOL 476	Buffered high viscosity hydroxypropyl guar		X	X	X	X		X	V	FR	SH	
Ashland	GALACTASOL 477	Self hydrating dispersible hydroxypropyl guar		X	X	X		X	X	V	FR	SH	
Ashland	GALACTASOL 638	Fast hydrating high viscosity carboxymethyl hydroxypropyl guar				X			X	V	FR		
Ashland	GALACTASOL 650	Carboxymethyl hydroxypropyl guar			X				X	V	FR	SH	
Ashland	GALACTASOL 651	Carboxymethyl hydroxypropyl guar			X				X	V	FR	SH	
Ashland	GALACTASOL 653	Diesel slurriable carboxymethyl hydroxypropyl guar				X			X	V	FR	SH	
Ashland	KLUCEL H OIL	Suspension agent for solvent-based systems	X	X			X	X		V		SH	
Ashland	NATROSOL 180 GXR	Low viscosity hydroxyethyl cellulose			X	X			X	FR	RDF	SH	
Ashland	NATROSOL 210 HHX	Ultra-high viscosity and fast hydrating hydroxyethyl cellulose			X	X	X		X	V	CF	SH	
Ashland	NATROSOL 250 EXR	Low viscosity hydroxyethyl cellulose			X	X			X	FR	RDF	SH	
Ashland	NATROSOL 250 GXR	Low viscosity hydroxyethyl cellulose			X	X			X	FR	RDF	SH	
Ashland	NATROSOL 250 HHR-P	Ultra-high viscosity hydroxyethyl cellulose			X	X	X		X	V	CF	LU	
Ashland	NATROSOL 250 JR	Low viscosity hydroxyethyl cellulose			X	X			X	FR	RDF	LU	
Ashland	NATROSOL 250 LR	Low viscosity hydroxyethyl cellulose			X	X			X	FR	RDF	LU	
Ashland	NATROSOL HI-VIS	Ultra-high viscosity hydroxyethyl cellulose			X	X	X		X	V	CF	SH	
Ashland	NATROSOL LIQUID HHR-P	Eco-friendly anhydrous suspension of Natrosol 250 HHR-P			X	X	X		X	V	CF	SH	
Ashland	NATROSOL LIQUID HHX	Eco-friendly anhydrous suspension of Natrosol 210 HHX			X	X	X		X	V	CF	SH	
Ashland	NATROSOL LIQUID MR	Eco-friendly anhydrous suspension of Natrosol HI-VIS			X	X	X		X	V	CF	SH	
Ashland	XXTRADURA DFA 3767	Dry synthetic high temperature fluid loss additive for drilling fluids	X	X	X	X	X		X	FR	HPHT	SH	
Ashland	XXTRADURA FLA 3766	Liquid universal fluid loss additive - anionic synthetic copolymer	X	X	X	X	X		X	FR	HPHT	SH	
Ashland	XXTRADURA FLA 3767	Dry universal fluid loss additive - anionic synthetic copolymer	X	X	X	X	X		X	FR	HPHT	SH	
Ashland	XXTRADURA GMA 4176	Liquid synthetic gas migration control additive	X	X	X	X	X		X	FR	HPHT		
Ashland	XXTRADURA GMA 4176HD	Liquid synthetic gas migration control additive	X	X	X	X	X		X	FR	HPHT		
Ashland	XXTRADURA GMA 4176HDP	Dry synthetic gas migration control additive	X	X	X	X	X		X	FR	HPHT		
Ashland	XXTRADURA GMA 4176P	Dry synthetic gas migration control additive	X	X	X	X	X		X	FR	HPHT		
Ava	AVA AS-1	Scale inhibitor							X	CA		CF	
Ava	AVA BRIDGEPAK C/M	Blend of granular and fibrous bridging agents	X	X	X	X	X	X		MLCM			
Ava	AVA DEFOAM	Alcohol-based defoamer	X	X	X	X	X						
Ava	AVA EXTRADRILL	Organic compounds for shale inhibition	X	X	X	X	X			SH	FR		
Ava	AVA FASTDRILL	Blend of organic/inorganic compounds for shale inhibition	X	X	X	X	X			SH	FR		
Ava	AVA K142	Potassium acetate brine	X	X	X	X	X			SH	W		
Ava	AVA LST-MD	Liquid sulfonate asphalt	X	X	X	X	X			SH	FR		
Ava	AVA MB-HS38	Microbubbles of borosilicate glass	X	X	X	X	X	X	X	W	RDF	HPHT	
Ava	AVA PHPAGUNK	PHPA powder	X	X	X	X	X	X		MLCM	SH	HPHT	
Ava	AVA QUICKDRILL	Blend of natural compounds	X	X	X	X	X			MLCM			
Ava	AVA X-PRIMA	Lost circulation squeeze	X	X	X	X	X	X		MLCM		FR	
Ava	AVABENTOL ECT	Organophilic hectorite						X	X	V	FR		
Ava	AVABENTOL HY	High-yield organophilic bentonite						X	X	V	FR	FR	
Ava	AVABENTOL RM	High-yield organophilic bentonite						X	X	V	FR		
Ava	AVABENTOL SA	Low-yield suspending agent						X	X	V		SU	
Ava	AVABEX	Bentonite extender	X	X	X	X	X	X		X	V	HPHT	
Ava	AVABIOMBENT	Low-yield suspending agent for AVALAO system						X	X	V			
Ava	AVABIOCARB	Organic compounds and potassium carbonate	X	X	X	X	X	X		X	SH	FR	FR
Ava	AVABIOFIL	Lignite polymer for fluid loss control						X	X	FR	E	SU	
Ava	AVABIOFIL HT	Synthetic polymer for fluid loss control						X	X	FR	E	SU	
Ava	AVABIOIL	AVALAO linear and polyalphaolefines-based oil						X	X	SB		TE	
Ava	AVABIOLUBE	Natural polymer shale stabilizer	X	X	X	X	X	X		X	SH	LU	TE
Ava	AVABIOMOD	Rheology modifier for AVALAO system						X	X	V	E		
Ava	AVABIOPRI	AVALAO primary emulsifier for low oil cutting retentions						X	X	E	FR		
Ava	AVABIOSEC	AVALAO secondary emulsifier for low oil cutting retentions						X	X	E	FR		
Ava	AVABIOTHIN	Thinner for AVALAO system						X	X	TH	FR		
Ava	AVABIOVIS	High-yield suspending agent for AVALAO system						X	X	V	FR		
Ava	AVABIOWET	Wetting agent for AVALAO system						X	X	SU	E		
Ava	AVABUFFER	Alkaline buffer	X	X	X	X	X			A			
Ava	AVACARB ME	Metamorphic calcium carbonate	X	X	X	X	X	X	X	W	LO		
Ava	AVACELL LQD	Liquid hydroxyl ethyl cellulose	X	X	X	X	X			B			
Ava	AVACID 50	Liquid biocide	X	X	X	X	X			B			
Ava	AVACID F/25	Liquid biocide	X	X	X	X	X						
Ava	AVACLAYBLOCK	Organic compound for shale inhibition	X	X		X	X	X		SH	FR	E	
Ava	AVACLAYBLOCK ACT	Inorganic compounds for shale inhibition	X	X		X	X	X		SH	FR	E	



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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Alr, mist, foam, gas
Ava	AVADEFAM	Liquid defoamer based on alcoholic components	X	X	X	X	X		D	
Ava	AVADEG 327	Multifunctional surfactant	X	X	X	X	X		SU	
Ava	AVADES 100	Hydrogen sulphide scavenger	X	X	X	X	X		CO	HPHT
Ava	AVADER	Mud detergent	X	X	X	X	X		X	SU LU HPHT
Ava	AVANION	Non-ionic emulsifier	X	X	X	X	X		X	E SU
Ava	AVAXTEMP	Liquid temp. extender	X	X	X	X	X		T	TE
Ava	AVAFLOW G71	Modified Fe-Cr lignosulfonate	X	X	X	X			TH	FR
Ava	AVAFLOW NP	Chrome-free lignosulfonate	X	X	X	X			TH	FR
Ava	AVAFLOW S1	Foamer for AVAFLOW system						X	FO	E RDF
Ava	AVAFLOW S2	Salt-resistant foaming agent						X	FO	E RDF
Ava	AVAFREE 2	No oil-free pipe and cake removal agent	X	X	X	X	X		X	P SH
Ava	AVA-FS	Bituminous/bentonite fluid loss additive	X	X	X	X		X	FR	SH
Ava	AVAFULFLOW	Blend of polymers and sized calcium carbonate	X		X	X			V	FR LU
Ava	AVAFULFLOW/UB	Polymers, sized calcium carbonate and glass microspheres	X		X	X			V	FR HS
Ava	AVAGEL HY	High-yield bentonite	X	X	X	X	X		V	HPWB HS
Ava	AVAGEL PLUS	Wyoming bentonite	X	X	X	X	X		V	HPWB HS
Ava	AVAGELS	Water-dispersible gilsonite	X	X	X	X	X		SH	FR HS
Ava	AVAGLYCO	Glycol-based lubricity aid	X	X	X	X	X		X	SH LU
Ava	AVAGLYCO HC	High-Cloud point glycol	X	X	X	X	X		SH	LU
Ava	AVAGLYCO II	High-Cloud point glycol	X	X	X	X	X		X	SH LU FR
Ava	AVAGLYCO LC	Low-Cloud point glycol	X	X	X	X	X		SH	LU
Ava	AVAGRAPH	Natural graphite	X	X	X	X	X	X	LO	LU
Ava	AVAGRAPH SEAL	Natural graphite	X	X	X	X	X	X	LO	LU CF
Ava	AVAGREENLUBE	Ester-based vegetable LU	X	X	X	X	X		X	LU SH HPHT
Ava	AVAGREENLUBE SIL	Ester-based LU for silicate and potassium mud	X	X	X	X	X		X	LU FR HPHT
Ava	AVAGUM	Modified guar gum	X	X	X	X	X		X	V HPHT
Ava	AVAK157	Potassium formate brine	X	X	X	X	X		V	SH HPHT
Ava	AVALIG	Modified chrome lignite	X	X	X	X	X		TH	FR CA
Ava	AVALIG C	Modified causticized lignite	X	X	X	X	X		TH	FR
Ava	AVALIG K	Modified potassium lignite	X	X	X	X	X		TH	FR
Ava	AVALIG NE	Humalite	X	X	X	X	X		W	SH
Ava	AVALTO 2000	Dispersant for lime muds and KLM system			X	X			TH	FR LU
Ava	AVAPERM	Amine-based shale stabilizer	X	X	X	X	X		SH	
Ava	AVAPOLY A	Polymer compound	X	X	X	X	X		FL	HPWB
Ava	AVAPOLY HT	Polymer compound	X	X	X	X	X		FR	HPHT FR
Ava	AVAPOLY PGL	Polyglycerol	X	X	X	X	X		SH	HS
Ava	AVAPOLYMER 5050	Powdered shale inhibitor	X	X	X	X	X		SH	FR LU
Ava	AVAPOLYOL	Shale stabilizer	X	X	X	X	X		X	SH LU SH
Ava	AVAPOLYPAC LV	Potassium PAC regular	X	X	X	X	X		X	V SH
Ava	AVAPOLYPAC RG	Potassium PAC low viscosity	X	X	X	X	X		X	FR SH
Ava	AVAPOLYSIL	Organic compound and potassium salts shale inhibitor	X	X	X	X	X		SH	FR
Ava	AVAPOLYTEMP	Pure grade filtrate reducer for Avafulflow	X	X	X	X	X		FR	TE
Ava	AVAREX	Modified polymer for extreme high temp.	X	X	X	X	X		X	TE FR
Ava	AVASHALESTOP	Organic compound for shale inhibition	X	X	X	X	X		SH	FR
Ava	AVASHALESTOP ACT	Inorganic compounds for shale inhibition	X	X	X	X	X		SH	FR
Ava	AVASIL	Silicone-based defoamer	X	X	X	X	X		X	D
Ava	AVASILUX 22	Base product for AVASILUX system			X	X			SH	TE
Ava	AVASILUX 39	Base product for AVASILUX system			X	X			SH	TE
Ava	AVASINTOIL	AVASINTOIL system ester-based biodegradable oil						X	SB	TE
Ava	AVASINTOIL FC	Fluid loss control agent for AVASINTOIL system						X	FR	
Ava	AVASINTOIL PE	AVASINTOIL system primary emulsifier						X	E	FR
Ava	AVASINTOIL SE	AVASINTOIL system secondary emulsifier						X	E	FR
Ava	AVASINTOIL TN	Thinner for AVASINTOIL system						X	TH	FR
Ava	AVASINTOIL VS	High-yield suspending agent for AVASINTOIL system						X	V	FR
Ava	AVASINTOIL WA	Wetting agent for AVASINTOIL system						X	SU	E
Ava	AVASTAT 350	Antistatic agent for section milling	X	X	X	X	X		SU	HPHT
Ava	AVATEMP	Temp. extender	X	X	X	X	X		T	FR
Ava	AVATENSIO	Free-pipe agent	X	X	X	X	X		X	P
Ava	AVATENSIO LT	Low-toxicity pipe-freeing agent	X	X	X	X	X		X	P
Ava	AVATEX	Sodium sulfonate asphalt	X	X	X	X	X		SH	FR V
Ava	AVATHIN	Acrylic acid grafted lignosulfonate			X	X			TH	HPHT
Ava	AVATRACER	Potassium iodide tracer	X	X	X	X	X	X		
Ava	AVATRASFOAM	Foamer for AVATRASFOAM system						X	FO	
Ava	AVAVIS-MMH	Polymer for MMH system			X				WBC	SH
Ava	AVAWASH 500	Cake removal agent	X	X	X	X	X		SU	FR
Ava	AVAWASH OBM	Casing cleaner for oil-based mud						X	SU	SU
Ava	AVAWASH OBM/LT	Casing cleaner for low-toxicity oil-based mud						X	SU	HPHT
Ava	AVAWASH WBM	Casing cleaner for water-based mud	X	X	X	X			SU	HPHT
Ava	AVAZR 5000	Chrome-free HPHT thinner	X	X	X	X	X		TH	HPHT SU
Ava	AVOIL FC	Lignite-based fluid loss reducer						X	FR	E SU
Ava	AVOIL FR/HT	Asphalt-based fluid loss reducer						X	FR	SU TE
Ava	AVOIL FRAND	Non-damaging liquid polymeric fluid loss reducer						X	FR	SU TE
Ava	AVOIL PE	Primary emulsifier						X	E	FR TE
Ava	AVOIL PE/LT	Primary emulsifier						X	E	FR TE
Ava	AVOIL SE	Secondary emulsifier						X	E	FR SU
Ava	AVOIL SE/LT	Secondary emulsifier						X	E	FR SU
Ava	AVOIL TN	OBM thinner						X	TH	FR
Ava	AVOIL TN/LT	Low-toxicity OBM thinner						X	TH	FR
Ava	AVOIL VS	Rheology modifier						X	V	E
Ava	AVOIL VS/LT	Rheology modifier						X	V	E

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems						Product Function				
			Water-based fluids					Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids						
Ava	AVOIL WA	Wetting agent							X		SU		E
Ava	AVOIL WA/LT	Wetting agent							X		SU		E
Ava	DE BLOCK S/LT	Low-toxicity weighted mud-free P	X	X	X	X	X	X		X	P		
Ava	DE BLOCK S/WB	Water-based P	X	X	X	X	X	X		X	P		
Ava	DEOXI SS	Oxygen remover	X	X	X	X	X	X		X	CO	CF	TE
Ava	DEOXY DEHA	Oxygen remover	X	X	X	X	X	X			CO	CF	TE
Ava	DOLSAL	Sepiolite clay	X	X	X	X	X	X			V		
Ava	DOLSAL B	Attapulgite clay	X	X	X	X	X	X			V		TE
Ava	DYNA RETARDER	Retarder for DYNAPLUG	X	X	X	X	X	X	X	X	LO	WBC	
Ava	DYNAPLUG	Fibers, polymers and cross-linker	X	X	X	X	X	X	X	X	LO	WBC	
Ava	ECOL LUBE	Biodegradable LU	X	X	X	X	X	X		X	LU	FR	
Ava	ECOL LUBE HT	LU for geothermal wells	X	X	X	X	X	X		X	LU	FR	
Ava	ECOL LUBE SIL	LU for silicate and potassium mud	X	X	X	X	X	X		X	LU	FR	CF
Ava	ECOLUBE LG	Non-toxic lubricant	X	X	X	X	X	X			LU	SH	
Ava	GRANULAR F/M/C	LCM-based on vegetable shell, F,M,C	X	X	X	X	X	X			LO		HPHT
Ava	INCORR	Water-dispersible CO	X	X	X	X	X	X		X	CO	CF	CF
Ava	INCORR 2275	Amine-free CO and scale inhibitor	X	X	X	X	X	X		X	CO	CA	
Ava	INCORR AC	CO in acid environment	X	X	X	X	X	X			CO	CF	
Ava	INCORR AC/HT	CO in HT acid environment	X	X	X	X	X	X			CO	CF	
Ava	INCORR HT	Water-dispersible HT CO	X	X	X	X	X	X			CO	HPHT	
Ava	INCORR OS	Oil soluble CO	X	X	X	X	X	X			CO		
Ava	INTAFLOW	Acid soluble marble flour	X	X	X	X	X	X	X		LO	RDF	
Ava	INTASOL 10	Specially-ground calcium carbonate	X	X	X	X	X	X	X		LO		
Ava	INTASOL 5	Specially-ground calcium carbonate	X	X	X	X	X	X	X		LO	RDF	
Ava	INTASOL C4000	Specially-ground calcium carbonate	X	X	X	X	X	X	X		LO	RDF	SH
Ava	INTASOL F/M/C	Specially-ground calcium carbonate, F,M,C	X	X	X	X	X	X	X		LO	RDF	
Ava	INTASOL FLAKE F/M/C	Specialized sized flake calcium carbonate	X	X	X	X	X	X	X		LO	RDF	FR
Ava	INTASOL ME F/M/C	Metamorphic calcium carbonate, F,M,C	X	X	X	X	X	X	X		LO	RDF	HPHT
Ava	POLICELL RG	Technical grade PAC regular	X	X	X	X	X	X		X	V	FR	HPHT
Ava	POLICELL SL	Technical grade PAC low vis	X	X	X	X	X	X		X	FR	SH	
Ava	POLIFLUID	Synthetic chrome-free TH	X	X	X	X	X	X			TH	TE	
Ava	POLIVIS	Modified liquid PHPA	X		X	X	X	X		X	SH	V	TE
Ava	POLIVIS PWD	Encapsulated polymer (powder)	X		X	X	X	X		X	SH	V	
Ava	SAND SEAL F/C	Sealing agent for pay zone LO, fine, coarse	X	X	X	X	X	X	X		LO	FR	
Ava	STEARALL LQD	Defoamer compound for dispersed muds	X	X	X	X	X	X		X	D		
Ava	TCS 30	Non ionic drilling mud surfactant	X	X	X	X	X	X		SU		LU	SH
Ava	VICTOMOD	High temp. modified starch	X	X	X	X	X	X		FR			SH
Ava	VICTOSAL	Modified resistant starch	X	X	X	X	X	X		X	FR		SH
Ava	VICTOSAL MMH	Modified resistant starch for MMH system			X	X					FR	SH	
Ava	VISCO 83	Pure PAC regular	X	X	X	X	X	X		X	V	FR	
Ava	VISCO 83 EHV	Pure PAC extreme high viscosity	X	X	X	X	X	X		X	V	FR	RDF
Ava	VISCO 83 LOD	Liquid polyanionic polymer	X	X	X	X	X	X		X	V	FR	RDF
Ava	VISCO 83 SL	Pure PAC super low	X	X	X	X	X	X		X	FR	SH	
Ava	VISCO 83 XLV	Pure PAC extreme low	X	X	X	X	X	X		X	FR	SH	
Ava	VISCO ACT	Biopolymer	X	X	X	X	X	X		X	V	SH	
Ava	VISCO DIF	Blend of biopolymer for DIF	X	X	X	X	X	X		X	V	FR	
Ava	VISCO EXH/V3000	Extremely high viscosifiers for spud mud	X	X	X	X	X	X		X	V	SH	
Ava	VISCO WEL	High temp. low-end viscosifier	X	X	X	X	X	X			V		
Ava	VISCO X	Biopolymer	X	X	X	X	X	X		X	V	SH	SH
Ava	VISCO XC	Biopolymer	X	X	X	X	X	X		X	V	SH	
Ava	VISCO XC84	Pure xanthan gum polymer	X	X	X	X	X	X		X	V	SH	
Ava	VISCO XCD	Pure dispersible xanthan gum polymer	X	X	X	X	X	X		X	V	SH	
Ava	VISCO COMED	Medium viscosity pure PAC	X	X	X	X	X	X		X	FR	V	
Ava	VISCOPLUS	Low-viscosity pure PAC	X	X	X	X	X	X		X	FR	SH	
Ava	VISCOTRON	High temp. viscosifier for water-based mud	X	X		X	X	X			V	HPHT	HPHT
Baroid	ACCOLADE BASE	Synthetic olefin/ester blend-based fluid							X		SB		
Baroid	ADAPTA	Copolymer for non-aqueous fluids							X	X	FR		
Baroid	AK-70	Asphaltic blend	X	X	X	X	X	X			SH	FR	
Baroid	AKTAFLO S	Non-ionic surfactant			X	X	X	X			TE	SU	
Baroid	ALDADIDE G	Glutaraldehyde solution	X	X	X	X	X	X			B		HPHT
Baroid	AQUAGEL	Wyoming bentonite	X	X	X	X	X	X			V	FR	
Baroid	AQUAGEL GOLD SEAL	Untreated Wyoming bentonite	X	X	X	X	X	X			V	FR	LU
Baroid	AQUA-LATE	Non-aqueous spacer for water activated products	X	X	X	X	X	X	X	X	LO		LU
Baroid	AQUATONE-S	Non-ionic surfactant			X	X	X	X			TE	SU	
Baroid	ATC	Modified fatty acid ester							X	X	TH		
Baroid	BARABLOK	Powdered hydrocarbon resin	X	X	X	X	X	X	X	X	FR	SH	
Baroid	BARABLOK 400	High temp., powdered hydrocarbon resin	X	X	X	X	X	X	X	X	FR	SH	FR
Baroid	BARABRINE DEFOAM	Brine defoamer	X	X	X	X	X	X			D	CF	FR
Baroid	BARABRINE SI	Scale inhibitor for clear brines									CO	CF	
Baroid	BARABUF	pH buffer	X			X	X	X			A	FR	
Baroid	BARACARB	Sized calcium carbonate-5, 25, 50,150, 600, 1200	X	X	X	X	X	X	X	X	LO	W	CF
Baroid	BARACARB-DF	Sized calcium carbonate-5, 25, 50,150, 600	X	X	X	X	X	X	X	X	LO	W	
Baroid	BARACAT	Cationic polymer solution	X		X	X	X	X			SH	FL	
Baroid	BARACOR 100	Corrosion inhibitor							X		CO	CF	
Baroid	BARACOR 450	High temp. corrosion inhibitor for high-density brines									CO	TE	
Baroid	BARACOR 700	Corrosion/scale inhibitor	X		X					X	CO		
Baroid	BARACOR 700E	Corrosion/scale inhibitor	X		X					X	CO		
Baroid	BARACOR 95	Corrosion inhibitor	X			X	X	X			CO	A	
Baroid	BARACTIVE	Polar activator							X	X	V	FR	
Baroid	BARA-DEFOAM 1	Defoamer	X	X	X	X	X	X			D	SU	
Baroid	BARA-DEFOAM HP	Defoamer	X	X	X	X	X	X			D		
Baroid	BARA-DEFOAM W300	Defoamer	X	X	X	X	X	X			D		A
Baroid	BARAFILM	Filming amine	X	X	X	X	X	X		X	CO		
Baroid	BARAFLAKE M, C	Flake calcium carbonate	X	X	X	X	X	X	X		LO	FR	
Baroid	BARAFLO C	Floculant	X			X					FL		

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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Baroid	BARAFOS	Sodium polyphosphate compound	X		X	X				TH CA
Baroid	BARAKLEAN	Cleaning, degreaser compound								SU WBC
Baroid	BARAKLEAN DUAL	Surfactant/solvent blend for displacement spacers						X	X	SU WBC
Baroid	BARAKLEAN FL	Surfactant blend for displacement spacers						X	X	SU WBC FR
Baroid	BARAKLEAN FL PLUS	Concentrated surfactant blend for displacement spacers						X	X	SU WBC
Baroid	BARAKLEAN GOLD	Concentrated surfactant blend for displacement spacers						X	X	SU WBC
Baroid	BARAKLEAN NS PLUS	Concentrated surfactant blend for displacement spacers						X	X	SU WBC RDF
Baroid	BARANEX	Modified lignin polymer	X	X	X	X	X			FR TE
Baroid	BARAPAK	Oil-soluble polymer						X	X	V
Baroid	BARAPLUG	Sized salt-20, 50, 6/300					X			LO W
Baroid	BARAPRESIN-VIS	Oil viscosifier						X	X	V
Baroid	BARASCAV-D	Powdered oxygen scavenger	X	X	X	X	X			CO
Baroid	BARASCAV-L	Liquid oxygen scavenger	X	X	X	X	X			CO
Baroid	BARASCRIUB	Surfactant for wellbore cleanup						X	X	SU WBC
Baroid	BaraShield-663	Premium fine-sized granular multi-modal LCM	X	X	X	X	X	X	X	
Baroid	BaraShield-664	Medium-Sized granular multi-modal LCM	X	X	X	X	X	X	X	
Baroid	BaraBlend-665	Premium granular, high fluid loss LCM	X	X	X	X	X	X	X	
Baroid	BaraLock-666 (F, M, C)	Premium fine, medium and coarse-sized reticulated foam LCM	X	X	X	X	X	X	X	
Baroid	BARASORB	Cellulosic filtration aid						X		CF
Baroid	BARATHIN-PLUS	Organic mud thinner		X	X	X	X			TH FR
Baroid	BARAVIS	Non-ionic hydroxyethyl cellulose polymer	X	X	X	X	X			W FR
Baroid	BARAWEIGHT	Iron carbonate powder	X	X	X	X	X	X	X	W
Baroid	BARAZAN	Xanthan gum	X	X	X	X	X			V
Baroid	BARAZAN D	Dispersion-enhanced xanthan gum	X	X	X	X	X			V
Baroid	BARAZAN D PLUS	Premium dispersion-enhanced xanthan gum	X	X	X	X	X			V
Baroid	BARAZAN L	Xanthan suspension	X	X	X	X	X			V
Baroid	BARODENSE	Hematite	X	X	X	X	X	X	X	W
Baroid	BAROFIBRE	Seepage-loss additive - regular, coarse and superfine	X	X	X	X	X	X	X	LO
Baroid	BAROFIBRE O	Oil wet seepage-loss additive	X	X	X	X	X	X	X	LO LU
Baroid	BAROID	Barite	X	X	X	X	X	X	X	W
Baroid	BAROID 41	Barite 4.1 specific gravity	X	X	X	X	X	X	X	W
Baroid	BAROID ALKANE	Synthetic paraffin-based oil						X		SB
Baroid	BAROID CONCENTRATE 111	Sulfurized oil mixture	X	X	X	X	X			LU
Baroid	BAROID F10	Barite 10 micron average diameter	X	X	X	X	X	X	X	W
Baroid	BAROID RIG WASH	Cleaning, degreaser compound								SU
Baroid	BAROLIFT	Hole-cleaning aid	X	X	X	X	X	X	X	WBC
Baroid	BARO-LUBE GOLD SEAL	Surfactant/lubricant blend	X	X	X	X	X			LU
Baroid	BAROMUL 290	Oil mud emulsifier for diesel fluids						X		E SU
Baroid	BAROMUL 303	Oil mud emulsifier						X		E SU
Baroid	BARO-SEAL	Sized LCM blend-classic, fine, medium and coarse	X	X	X	X	X			LO
Baroid	BARO-TROL PLUS	Enhanced shale stabilizer	X	X	X	X	X			SH FL HPWB
Baroid	BORE-HIB DP	Dry powder inorganic salt blend	X	X	X	X				SH HPWB
Baroid	BORE-HIB II	Liquid inorganic salt blend	X	X	X	X				SH HPWB
Baroid	BORE-PLUS	Polymer blend	X	X	X	X	X			V FR
Baroid	BORE-VIS II	Modified bentonite	X	X	X	X				V HPWB FR
Baroid	BRINEDRILL-VIS	Biopolymer	X	X	X	X	X			V SU E
Baroid	BROMI-MUL	Brine-in-oil emulsifier						X	X	E
Baroid	BROMI-VIS	Pre-dispersed polymer suspension						X		V CF
Baroid	BXR	Borehole stabilizer	X	X	X	X	X			SH LU
Baroid	BXR-L	Borehole stabilizer suspension	X	X	X	X				SH FR
Baroid	CARBONOX	Lignite/Leonardite		X	X	X				TH FR
Baroid	CLAY GRABBER	Clay inhibitor	X		X	X	X			SH HPWB
Baroid	CLAY SYNC II	Clay inhibitor	X		X	X	X			SH HPWB
Baroid	CMO 568	Lubricant for non-aqueous fluids						X	X	LU
Baroid	COLDTROL	Rheological additive						X	X	TH
Baroid	CON DET	Mud detergent	X	X	X	X				SU E
Baroid	CON DET E	Water-soluble surfactant blend	X	X	X	X	X			SH SU
Baroid	CRYSTAL-DRILL	Liquid cationic polymer	X		X	X				FL SH
Baroid	DEEP-TREAT	Wetting agent						X	X	SU TH
Baroid	DEXTRID	Modified and bacteria-stabilized starch	X	X	X	X	X			FR SH
Baroid	DEXTRID E	Modified starch	X	X	X	X	X			FR SH
Baroid	DEXTRID LT	Modified and bacteria-stabilized starch	X	X	X	X	X			FR SH
Baroid	DEXTRID LTE	Modified and bacteria-stabilized starch	X	X	X	X	X			FR SH
Baroid	DIAMOND SEAL	Crystalline synthetic polymer	X	X	X	X	X			LO
Baroid	DRILL STARCH	Pregelatinized starch	X	X	X	X	X			FR
Baroid	DRILL-N-SLIDE	ROP enhancer	X	X		X	X			LU
Baroid	DRILLTREAT	Oil-wetting agent						X	X	SU E
Baroid	DUO-SQUEEZE H	Bimodal distribution LCM	X	X	X	X	X	X	X	LO MLCM
Baroid	DUO-SQUEEZE R	Acid soluble Bimodal distribution LCM	X	X	X	X	X	X	X	LO MLCM
Baroid	DURATONE E	Oil mud filtration control additive						X	X	FR HPHT
Baroid	DURATONE HT	Oil mud filtration control additive						X	X	FR HPHT
Baroid	ENCORE BASE	Synthetic olefin-based oil						X		SB
Baroid	ENVIRO-THIN	Chrom-free lignosulfonate	X	X		X	X			TH FL
Baroid	ENVIRO-TORQ	Broad-spectrum lubricant	X	X	X	X	X			LU
Baroid	EP MUDLUBE	Extreme-pressure lubricant	X	X	X	X				LU
Baroid	EXTENSOL	Salt crystal growth inhibitor				X				TE
Baroid	EZ GLIDE	Proprietary blend of surfactants	X	X		X	X			LU
Baroid	EZ MUL	Oil mud emulsifier for Diesel fluids						X		SU
Baroid	EZ MUL NS	Oil mud emulsifier for North Sea						X	X	E SU
Baroid	EZ MUL NT	Oil mud emulsifier						X	X	E SU

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Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary function	Secondary function
Baroid	EZ SPOT	Spotting fluid concentrate	X	X	X	X	X	X				P	LU
Baroid	EZ-CORE	Fatty acid emulsifier							X	X		E	RDF
Baroid	EZ-FLOC	Polymer emulsion	X	X		X	X	X			X	FL	
Baroid	EZ-MUD	Shale-stabilizing polymer emulsion	X	X		X	X	X			X	SH	
Baroid	EZ-MUD DP	Powdered shale-stabilizing polymer	X	X		X	X	X				SH	
Baroid	EZ-MUD GOLD	Low-viscosity powdered shale-stabilizing polymer	X	X		X	X	X				SH	
Baroid	EZ-PLUG	Blend of acid soluble lost circulation control materials	X	X	X	X	X	X				LO	MLCM
Baroid	FACTANT	Concentrated invert emulsifier							X	X		E	FR
Baroid	FILTER-CHEK	Fermentation-resistant modified starch	X	X	X	X	X	X				FR	V
Baroid	FLO-CLEAN MD	Flocculant for calcium brines										FL	CF
Baroid	FLO-CLEAN Z	Flocculant for zinc brines										FL	CF
Baroid	FOAM-ZAPPER	Defoamer	X	X	X	X	X	X				D	SU
Baroid	FORTI-MUL	Emulsifier for INTEGRADE fluids							X			E	
Baroid	FUSE-IT	Polymer-based LCM	X	X	X	X	X	X	X	X		LO	MLCM
Baroid	GELTONE II	Organophilic clay							X	X		FR	V
Baroid	GELTONE V	Organophilic clay							X	X		V	FR
Baroid	GEM CP	Polyglycol	X	X	X	X	X	X				SH	
Baroid	GEM GP	Polyglycol	X	X	X	X	X	X				SH	
Baroid	GEM GPE	Polyglycol											
Baroid	HYDRO-PLUG	LCM blend	X	X	X	X	X	X	X	X		LO	MLCM
Baroid	HYDRO-PLUG NS	North Sea LCM blend	X	X	X	X	X	X	X	X		LO	MLCM
Baroid	IMPERMEX	Pre-gelatinized starch	X	X	X	X	X	X				FR	V
Baroid	INHIBI-TAR	Inorganic salt blend pill to stabilize tar zones	X	X	X	X	X	X	X	X		SU	LU
Baroid	INNOCLEAR	Refined n-alkane-based fluid							X				
Baroid	INVERMUL	Oil mud emulsifier							X			E	SU
Baroid	INVERMUL NT	Oil mud emulsifier							X			E	SU
Baroid	IRON-THIN	Iron lignosulfonate water-based mud thinner		X								TH	
Baroid	LE BASE	Olefin-based fluid								X		SB	
Baroid	LE SUPERMUL	Emulsifier for synthetic fluids							X			E	SU
Baroid	LIGNOX PLUS	Lime mud thinner		X	X							TH	FR
Baroid	LIQUI-DRILL	ROP enhancer	X	X		X	X	X				LU	
Baroid	LIQUITONE	Oil mud filtration control additive							X	X		FR	
Baroid	LIQUI-VIS EP	Polymer dispersion						X			X	V	
Baroid	LUBRA-BEADS	Copolymer bead lubricant	X	X	X	X	X	X	X			LU	
Baroid	N-DRILL HT PLUS	Modified starch	X	X	X	X	X	X				FR	RDF
Baroid	N-FLOW 325	Time and temp. controlled wall-cake removal product	X	X	X	X	X	X	X	X		WBC	
Baroid	N-FLOW 408	Time and temp. controlled wall-cake removal product	X	X	X	X	X	X	X	X		WBC	
Baroid	NO BLOK C	Non-emulsifier for calcium brines										SU	CF
Baroid	NO BLOK Z	Non-emulsifier for zinc-based brines										SU	CF
Baroid	NO-SULF	Zinc compound for sulfide scavenging	X	X	X	X	X	X	X	X		CO	
Baroid	N-PLEX	Activator for N-Squeeze	X	X	X	X	X	X				LO	RDF
Baroid	N-SEAL	Inorganic LCM	X	X	X	X	X	X	X	X		LO	RDF
Baroid	N-SOLATE 275 VIS	Synthetic polymer for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE 275 XLINK	Inorganic cross linker for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE 400 VIS	Synthetic polymer for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE 400 XLINK1	Inorganic cross linker for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE 400 XLINK2	Inorganic cross linker for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE 600 VIS	Synthetic polymer for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		V	
Baroid	N-SOLATE BASE	Base fluid for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		SB	
Baroid	N-SOLATE BASE BR	Base fluid for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		SB	
Baroid	N-SOLATE BASE CS	Base fluid for thermal insulating packer fluid system	X	X	X	X	X	X	X	X		SB	
Baroid	N-VIS	Biopolymer	X	X	X	X	X	X				V	RDF
Baroid	N-VIS HI	Bentonite extender	X	X	X							V	RDF
Baroid	N-VIS HI PLUS	Mixed metal hydroxide	X	X		X						V	RDF
Baroid	N-VIS L	Liquid xanthan gum	X	X	X	X	X					V	RDF
Baroid	N-VIS P PLUS	Blend of polymers	X	X	X	X	X	X				V	FR
Baroid	NXS-LUBE	Synthetic extreme-pressure lubricant	X	X	X	X	X	X				LU	
Baroid	OMC	Oil mud conditioner							X			TH	
Baroid	OMC 2	Oil mud conditioner							X	X		TH	
Baroid	OMC 42	Oil mud conditioner							X	X		TH	
Baroid	OXYGON	Oxygen scavenger	X	X	X	X	X	X				CO	
Baroid	PAC-L & LE	Low-viscosity polyanionic cellulose	X	X	X	X	X	X			X	FR	SH
Baroid	PAC-R & RE	Regular polyanionic cellulose	X	X	X	X	X	X			X	FR	SH
Baroid	PERFORMATROL	Shale-stabilizing polymer	X			X	X	X				SH	HPWB
Baroid	PETROFREE ESTER	Ester-based fluid								X		SB	
Baroid	PIPESCRUB	Pipe dope cleaning mixture										SU	WBC
Baroid	PLUG-GIT	Processed cedar fiber	X	X	X	X	X	X				LO	
Baroid	POLYAC PLUS	Low-viscosity polyacrylate	X	X		X	X	X				FR	V
Baroid	QUIK-FOAM	Foaming agent								X		FO	
Baroid	QUIK-FREE	Spotting fluid	X	X	X	X	X	X				P	LU
Baroid	QUIK-FREE NS	North Sea compliant spotting fluid	X	X	X	X	X	X				P	LU
Baroid	QUIK-GEL	High-yield bentonite	X	X		X	X	X				V	
Baroid	QUIK-THIN	Ferrochrome lignosulfonate	X	X	X	X	X	X				TH	FR
Baroid	QUIK-THIN PLUS	Chrome lignosulfonate	X	X	X	X	X	X				TH	FR
Baroid	RHEMOD L	Modified fatty acid							X	X		V	
Baroid	RHEOBOOST	Liquid mud viscosifier							X	X		V	



# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Primary
Baroid	RM-63	Polymeric rheology modifier						X	X	V
Baroid	SF BASE	Olefin-based fluid						X		SB
Baroid	SOURSCAV	Hydrogen sulfide scavenger	X	X	X	X	X	X	X	CO
Baroid	STARCIDE	Biocide	X	X	X	X	X			B
Baroid	STEELSEAL 50, 100, 400, 1000	Specially sized dual-composition carbon material	X	X	X	X	X	X	X	LO
Baroid	STICK-LESS 20	Glass spheres	X	X	X	X	X	X	X	LO
Baroid	STOPPIT	multi-modal LCM	X	X	X	X	X	X	X	
Baroid	SUSPENTONE	Organophilic clay						X	X	V
Baroid	SWEEP-WATE	Sized barite	X	X	X	X	X	X	X	W
Baroid	TAU-MOD	Amorphous/fibrous material						X	X	V
Baroid	TEMPERUS	Modified fatty acid						X	X	V
Baroid	THERMA-CHEK	High temp. filtrate reducer	X	X	X	X	X			FR
Baroid	THERMA-THIN	High temp. deflocculant	X	X	X	X	X			TH
Baroid	THERMA-VIS	Synthetic inorganic viscosifier	X	X	X	X				W
Baroid	TORQUE-LESS DI-170	Glass spheres	X	X	X	X	X	X	X	LO
Baroid	VIS-PLUS	Organic viscosifier						X	X	V
Baroid	WALL-NUT	Ground nut shell-coarse, medium, and fine	X	X	X	X	X	X	X	LC
Baroid	XLR-RATE	ROP enhancer	X	X	X	X	X			LU
Baroid	XP-07	Linear alkane-based fluid						X		SB
Baroid	X-TEND II	Bentonite extender	X			X	X			V
Baroid	ZEOGEL	Attapulgite		X			X			V
Barzagli	ABLUBE	Ecological lubricant (-based on vegetable oils)	X	X	X	X				LU
Barzagli	ABLUBE VS	Eco lubricant (-based on synthetic esters) - high pH resistant	X	X	X	X				
Barzagli	ABSPERSE 200	Dispersant acrylic polymer		X	X					TH
Barzagli	BIOGUM P	Dispersible guar product	X	X	X	X				V
Barzagli	CARBOGUM CKX	Xanthan gum-based polymer	X	X	X	X	X			V
Barzagli	CARBOGUM XK	Xanthan gum	X	X	X	X	X			V
Barzagli	DEFOAMER S	Defoamer	X	X						D
Barzagli	DETERDRILL DE	Drilling detergent								WBC
Barzagli	GEOGUM CMC/L	Carboxymethylcellulose - slurry (ready to use)	X		X	X				V
Barzagli	GEOGUM HC15000	HydroxyEthylCellulose	X		X	X				CF
Barzagli	GEOGUM HC15B	HydroxyEthylCellulose	X		X	X				CF
Barzagli	GEOGUM HC30000	HydroxyEthylCellulose	X		X	X				CF
Barzagli	GEOGUM HC300B	HydroxyEthylCellulose	X		X	X				CF
Barzagli	GEOGUM HC6000	HydroxyEthylCellulose	X		X	X				CF
Barzagli	GEOGUM HEC/L	HydroxyEthylCellulose - slurry (ready to use)			X	X				CF
Barzagli	GEOGUM HVS	Carboxymethyl cellulose-semipurified		X	X	X	X			FR
Barzagli	GEOGUM HVT	Carboxymethyl cellulose (API 13A)	X	X		X	X			SH
Barzagli	GEOGUM LVS	Carboxymethyl cellulose-semipurified								SH
Barzagli	GEOGUM LVT	Carboxymethyl cellulose (API 13A)	X	X	X	X	X			FR
Barzagli	GEOGUM PAC LV	Polyanionic cellulose (PAC), pure grade	X	X	X	X	X	X		FR
Barzagli	GEOGUM PAC ULV	Polyanionic cellulose (PAC), pure grade	X	X	X	X	X	X		FR
Barzagli	GUARFIX P	Guar gum-based polymer	X	X	X	X				V
Barzagli	PERFOAM AS	Foaming agent						X		FO
Barzagli	PERFOAM HP	Foaming agent						X		FO
Barzagli	POLYFIX CMM55	Powdered shale inhibitor polymer	X	X	X	X	X			FR
Barzagli	POLYFIX K-210	Cationic-shale inhibitor polymer-low viscosity	X	X	X	X	X			FR
Barzagli	VISCODRILL 140	PHPA			X	X				V
Barzagli	VISCODRILL 190	PHPA			X	X				SH
Barzagli	VISCODRILL E5	PHPA - liquid emulsion	X							V
BASF	ALCOMER 7125	Liquid-grade cationic coagulant	X	X	X	X	X			FL
BASF	ALCOMER 74L	Rheological control for water base fluids	X	X	X	X				TH
BASF	Alcomer 752	cationic flocculent beads				X				FL
BASF	Alcomer 755	cationic flocculent beads				X				FL
BASF	Alcomer 758	cationic flocculent beads				X				FL
BASF	ALCOMER 80	Non-ionic powder flocculant	X	X	X	X				FL
BASF	Alcomer 811	cationic flocculent powder				X				FL
BASF	Alcomer 812	cationic flocculent powder				X				FL
BASF	Alcomer 814	cationic flocculent powder				X				FL
BASF	ALCOMER 819	Powder-grade cationic flocculant				X				FL
BASF	ALCOMER 889	Liquid-grade high MW cationic coagulant	X	X	X	X	X			FL
BASF	ALCOMER 90L	High MW total FL liquid	X	X	X	X	X			FL
BASF	Alcomer 90P	anionic flocculent powder	X	X	X	X				FL
BASF	ALCOMER D1235	Wetting agent						X	X	SU
BASF	BASOCLEAN TYPES	Cleaning agents								SU
BASF	BASODRILL TYPES	Glycol shale inhibitors		X	X	X	X			SH
BASF	BASOGAN DR 130	Polycrylate thinner	X	X		X	X			TH
BASF	BASOPEG TYPES	Lubricants	X	X		X	X			TH
BASF	BASOPLUR TYPES	Lubricants	X	X		X	X			TH
BASF	BASOPUR DF 5	Defoamer for well service fluids		X	X	X	X			D
BASF	BASOSOL	Non-ionic surfactants	X	X		X	X			CF
BASF	BASOTRON KS1	Lubricants	X	X		X	X			LU
BASF	DC-150	Attapulgite			X					V
BASF	POLYDRILL	High temp. stable fluid loss polymer	X	X	X	X	X			FR
BASF	POLYTHIN	High temp. deflocculant, TH	X	X	X	X	X			TH
BASF	PolyVis II	MMH viscosifier	X			X				V
BASF	Myacide GA 25	Biocide, Glutaraldehyde 25% sol.	X	X		X	X			B
BASF	Myacide GA 50	Biocide, Glutaraldehyde 50% sol.	X	X		X	X			B
BCI	ADICARB	Sized calcium carbonate	X	X	X	X	X			LO
BCI	ADICFL	Chrome-free lignosulfonate	X	X	X	X	X			TH
BCI	ADIDEFOAM SC	Silicone-based defoamer for brine	X	X	X	X	X			D
BCI	ADIDEFOAM SP20	Alcohol-based defoamer and anti-foam for water-based fluids	X	X	X	X				D
BCI	ADIDET-DD	Biodegradable mud detergent	X	X	X	X	X			SU

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid  
**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymeric	Low solids	Saturated salt	Oil-based	Synthetic-based	Primary	Secondary	Secondary
BCI	ADIE-KLEEN	Nano-emulsion-based biodegradable multi-purpose degreaser	X	X	X	X	X	X	X	X	SU		
BCI	ADIE-THIN	Oil mud thinner/dispersant						X	X		TH		
BCI	ADIHDF 373	HPHT rheology stabilizer						X	X		V	TH	
BCI	ADIHEC-L	Suspended HEC viscosifier for completion and workover fluids				X		X			V		
BCI	ADIKLEEN-RW	Aqueous-based biodegradable low-foam degreaser	X	X	X	X	X	X	X	X	SU		
BCI	ADILUBE	Esther-based lubricant for water-based mud	X	X	X	X	X		X		LU		
BCI	ADIMOD-RM	Polymeric rheology modifier						X	X		V		
BCI	ADIMOD-S	Premium polymeric rheology modifier						X	X		V		
BCI	ADIMUL-P	Primary oil mud emulsifier						X	X		E		
BCI	ADIMUL-S	Oil mud emulsifier and wetting agent						X	X		E	SU	
BCI	ADIPACK	3-in-1 mixture of CO, biocide and oxygen scavenger				X	X				CO	B	
BCI	ADIPLUG	Ground nutshell	X	X	X	X	X				LO	W	
BCI	ADIPOLY-AC	Rheology modifier and stabilizer for HPHT and deepwater applications						X	X		V		
BCI	ADISPACER	Nano-emulsion biodegradable wellbore spacer and cleanup additives									WBC		
BCI	ADITROL	Filtration control agent						X	X		FR		FR
BCI	ADIMS	Oil mud viscosifier						X	X		V		SU
BCI	ADIZAN-L	Liquid-suspended xanthan gum for immediate yield	X	X		X	X				V	ROF	
BCI	ADIZAN-LG	Green-based liquid-suspended xanthan gum	X	X		X	X				V	RF	
BCIDF	660-L	Polymeric thinner liquid	X	X	X	X					TH	TE	
BCIDF	BALL-BUSTER-L	Anti-bit-balling lubricant	X	X	X	X					LU	P	
BCIDF	BT-250	Guar gum liquid	X	X	X	X			X	V			SH
BCIDF	DRILL-ZAN-L	Xanthan gum liquid	X	X	X	X			X	V			
BCIDF	BX-1	Bentonite extender	X		X					V	FL		FR
BCIDF	CI-323	Corrosion inhibitor	X	X	X	X	X				CO		
BCIDF	CMC HV	Carboxymethyl cellulose polymer	X	X	X						FR	V	
BCIDF	DEFOAMER-A	Liquid defoamer	X	X	X	X	X				D		
BCIDF	DIESCO	Organic mud thinner		X	X	X	X				TH	TE	SU
BCIDF	DIASEAL-M	LCM Squeeze additive	X	X	X	X	X	X			MLCM	LO	
BCIDF	DRILL BEADS (DENSE)	Mechanical lubricant, 3.0 SG	X	X	X	X	X	X	X		LU		SH
BCIDF	DRILL BEADS (LIGHT)	Mechanical lubricant, 1.1 SG	X	X	X	X	X	X			LU		LU
BCIDF	DRILLING DETERGENT	Surfactant and anti-bit-balling additive	X	X	X	X	X		X		SH	LU	
BCIDF	DRILL-ZAN-D	Xanthan Gum, dispersible	X	X	X	X	X		X	V			
BCIDF	DRISPAC REGULAR	Premium PAC polymer	X	X	X	X				FR	V		
BCIDF	DRISPAC SUPERLO	Premium PAC polymer	X	X	X	X				FR	SH	LO	
BCIDF	F-500	Foamer	X	X	X	X	X		X	FO	V	LU	
BCIDF	FLORIGEL HY	Attapulgite, API spec	X	X	X			X					
BCIDF	G-325 GEL	Wyoming NT bentonite exceeding API spec's, 180-barrel yield	X	X	X	X	X			V	FR	FR	
BCIDF	GILSONITE-NT	Untreated gilsonite	X	X	X	X	X	X	X		FR	LU	
BCIDF	GILSONITE-ST	Treated gilsonite	X	X	X	X	X				SH	FR	
BCIDF	GL-100	Polyol blend	X	X	X	X	X				LU	SH	FR
BCIDF	GL-150	Gilsonite liquid	X	X	X	X	X	X	X		LU	SH	
BCIDF	GRAPHITE	Amorphous graphite	X	X	X	X	X	X	X		LU	LO	
BCIDF	HEC-L	Hydroxyethyl cellulose liquid	X	X	X	X	X		X	V	FR	FR	
BCIDF	MAGMA-FIBER	Mineral fiber, LCM, acid soluble	X	X	X	X	X	X	X		LO	V	
BCIDF	MMX-1	Bentonite complexer, to 200°F	X		X	X					V	SH	
BCIDF	MMX-2	Bentonite complexer, to 275°F	X		X	X					V	SH	
BCIDF	MMX-3	Bentonite complexer, to 350°F	X		X	X					V	SH	V
BCIDF	MMX-4	Attapulgite complexer	X		X	X					V	SH	FR
BCIDF	MUD-LINER FIBER	Seepage and LCM control	X	X	X	X	X	X	X	X	LO	FR	
BCIDF	MUD-LINER G	Special graphite blend	X	X	X	X	X	X	X		LO	LU	
BCIDF	MUD-WISER FC	Carboxymethyl starch	X	X	X	X	X				FR	SH	
BCIDF	PHPA 35-L	Anionic polymer liquid	X	X	X	X	X		X	SH	V		
BCIDF	PIPE SPOT DFT-L	Oil surfactant	X	X	X	X	X	X			P		TH
BCIDF	PREMIUM GEL	Wyoming bentonite, API spec	X	X	X	X	X	X		X	V	FR	
BCIDF	Q-SEAL LCM	Blend of flakes, granules, fibers	X	X	X	X	X	X	X	X	LO		
BCIDF	Q-SEAL LCM FINE	Blend of flakes, granules, fibers	X	X	X	X	X	X	X	X	LO		
BCIDF	RESIN-PLEX	Modified lignin polymer	X	X	X	X	X				TE	FR	TE
BCIDF	RESIN-TEMP HT	Contaminant tolerant polymer for HT muds	X	X	X	X	X				TE	FR	
BCIDF	SF-1	Nonionic flocculant	X	X	X	X	X		X		FL	SH	
BCIDF	SI-585	Scale inhibitor	X	X	X	X	X				CO		TE
BCIDF	SOLTEX	Sulfonated asphalt	X	X	X	X	X	X	X	X	SH	LU	E
BCIDF	ST-6	Organic thinner	X	X	X	X	X				TH	FR	
BCIDF	ST-7	Organic thinner	X	X	X	X	X				TH	FR	
BCIDF	STABIL-FLO SPA	Sodium polyacrylate	X	X	X	X					FR	TH	E
BCIDF	STARLOSE	Drilling starch, pre-gel, pre-preserved	X	X	X	X	X				FR	SH	E
BCIDF	STARPAK II	Complexed starch	X	X	X	X	X				FR	SH	
BCIDF	SUPER DEFOAMER II	Liquid defoamer	X	X	X	X	X				D		SH
BCIDF	SUPERLUG	ND lignite	X	X	X	X	X	X			FR	TH	LU
BCIDF	SUPERTREAT	Treated ND lignite	X	X	X	X	X				FR	TH	
BCIDF	TRUE LUBE M/O	Borehole Lubricant	X	X	X	X	X	X			LU		
BCIDF	WELL-PAC, HI-VIS	Premium PAC dispersible grade polymer	X	X	X	X					FR	V	
BCIDF	WELL-PAC, LO-VIS	Premium PAC dispersible grade polymer	X	X	X	X					FR	SH	
BCIDF	Z-GARD	Hydrogen sulfide gas scavenger	X	X	X	X	X				CO		
BCIDF	ZINC CARBONATE	Hydrogen sulfide gas scavenger	X	X	X	X	X				CO		
BHI	ALL-TEMP	Synthetic high-temperature deflocculant	X	X			X				TH	HPHT	
BHI	AMPLU-FOAM	Foaming agent for mist & stiff foam drilling	X	X						X	FO		
BHI	AMPLU-FOAM FW	Drilling Foaming Agent for freshwater	X	X						X	FO		FR
BHI	AMPLU-FOAM SW	Drilling Foaming Agent for saltwater	X	X			X			X	FO		FR
BHI	AQUA-COL	Cloud-point glycol for shale control in fresh and low-salinity systems	X		X	X	X				SH	LU	

# World Oil's Fluids 2015

World Oil's Fluids 2015			Recommended for these systems							Product Function		
			Water-based fluids					Oil-based Synthetic-based Air, mist, foam, gas	Primary	Secondary	Secondary	
			Non-dispersed Dispersed	Calcium-treated Polymer	Low solids	Saturated salt						
Available from:	Product tradename	Description of material	X	X	X	X	X			SH	FR	
BHI	AQUA-COL B	Cloud-point glycol for shale control in medium-salinity systems	X	X	X	X	X			SH	FR	
BHI	AQUA-COL D	Cloud-point glycol for shale control in high-salinity systems	X	X	X	X	X			SH	LU	
BHI	AQUA-COL S	Cloud-point glycol for shale control in saturated salt systems	X			X	X	X		SH	LU	
BHI	AQUA-MAGIC	Oil-free differential sticking preventative	X	X	X	X	X	X		LU	FR	WBM, SB
BHI	BAKER-CLEAN 5	WB casing cleaning system for removal of WB and OBM contaminants										WBC
BHI	BAKER-CLEAN 6	A casing cleaning system and stabilizer for Baker Clean 5 in a viscosified system										WBC
BHI	BIO-COTE	Wetting agent							X	SU	TH	
BHI	BIO-DRILL	Bit balling preventor	X	X	X	X	X	X		FR	LU	
BHI	BIO-LOSE	Modified polysaccharide that resists bacterial degradation	X	X	X	X	X	X		FR	V	
BHI	BIO-PAQ	High performance organic derivative FR	X	X	X	X	X	X		FR	V	W
BHI	BIO-PAQ AR	High performance fluid loss control biopolymer	X	X	X	X	X	X		FR		W
BHI	BIO-SPOT	Premium non-hydrocarbon-based spotting fluid	X	X	X	X	X	X	X	P		W
BHI	BLACK MAGIC	Premium spotting fluid, pre-mixed	X	X	X	X	X	X		P		
BHI	BLACK MAGIC CLEAN	Premium spotting fluid, pre-mixed in environmentally acceptable based oil	X	X	X	X	X	X	X	P		
BHI	BLACK MAGIC LT	Premium spotting fluid, pre-mixed in low-toxicity mineral oil	X	X	X	X	X	X	X	P		
BHI	BLACK MAGIC PHALT FREE	Premium spotting fluid, non-asphaltic	X	X	X	X	X	X	X	P		
BHI	BLACK MAGIC SFT	Premium spotting fluid, sack concentrate	X	X	X	X	X	X	X	P		
BHI	BRIDGEFORM	Single sack wellbore strengthening system	X			X	X	X		SH	SP	
BHI	BRINE-PAC 3N1	3-in-1 corrosion inhibitor - multi-use				X	X	X		CO	CF	
BHI	BRINE-PAC XTS	Corrosion Inhibitor for solids-free fluids						X				
BHI	CARBO-GEL	Premium organoclay viscosifier						X	X	V	FR	
BHI	CARBO-GEL II	Organoclay viscosifier						X	X	V		TE
BHI	CARBO-MUL	Emulsifier and wetting agent						X		E	SU	
BHI	CARBO-MUL HT	High temp. emulsifier and wetting agent						X		E	SU	TE
BHI	CARBO-MUL HT N	High temp. emulsifier and wetting agent for Norway						X		E		
BHI	CARBO-MUL LT	Low temp. emulsifier and wetting agent						X		E	SU	
BHI	CABO-MUL XM	Cost effective, HP secondary emulsifier						X	X			
BHI	CARBO-SEAL	Modified hydrocarbon LCM for sealing						X	X	LO	E	FR
BHI	CARBO-TEC	High temp. emulsifier						X				
BHI	CARBO-TEC LT	Low temp. supplemental emulsifier						X	X	E	FR	
BHI	CARBO-TEC "S"	Supplemental emulsifier and viscosifier						X	X	E	V	V
BHI	CARBO-TEC XM	Cost effective, HP primary emulsifier						X	X	E		
BHI	CARBO-TROL A-9	Non-asphaltic/polymeric HPHT FR						X	X	FR	HPHT	
BHI	CARBO-TROL 375	FR with minimal effects on rheology						X	X	FR	HPHT	
BHI	CHEK-LOSS	Seepage-loss control, diff. sticking preventative	X	X	X	X	X	X	X	LO		
BHI	CHEK-LOSS COARSE	Coarse, complexed cellulosic for loss of circulation	X	X				X	X	LO		
BHI	CHEK-LOSS PLUS	High-lignin cellulosic LCM particularly for OBM/NAF with less adverse effect on PV and ES	X	X	X	X	X	X	X	LO		
BHI	CHEK-TROL	Clay swelling and hydration suppressant	X	X	X	X	X	X		SH		
BHI	CHEMTROL X	HPHT FR and rheological stabilizer for fresh or seawater applications	X	X	X	X	X	X		FR	TE	
BHI	CLAY-TROL	Clay swelling and hydration suppressant	X	X	X	X	X	X		SH	HPWB	
BHI	DEEP SWEEP	Coarse ground barite to improve hole cleaning	X	X	X	X	X	X	X	W		
BHI	DELTA-MUL	UK CEFAS compliant emulsifier/wetting agent						X	X	E		
BHI	DELTA-MUL XS	UK CEFAS compliant emulsifier/wetting agent						X	X	E		
BHI	DELTA-TROL	New HT Starch for PERFFLOW system	X	X			X			FR		
BHI	ECCO-BLOK	Resinous shale stabilizer and HPHT filtration reducer	X	X				X	X	SH	FR	
BHI	ECCO-GLYCOL	Glycol for shale control	X	X	X	X	X	X	X	SH	LU	W
BHI	ECCO-MUL E	Emulsifier for invert-emulsion systems						X	X	E	SU	RDF
BHI	ECCO-PAQ LV	Filtration control additive for freshwater systems	X	X		X	X			FR		
BHI	FC 30	Blend of sized and flaked calcium carbonate	X	X	X		X	X		FR	LO	
BHI	FLOW-CARB SERIES	Multiple grind size series of calcium carbonate	X	X	X	X	X	X	X	LO	FR	
BHI	GeoPACK	Oil based gravel pack carrier system							X	SB	W	SH
BHI	HYCAL I	Liquid calcium chloride (to 11.6 ppg)	X				X			W	SH	
BHI	HYCAL II	Liquid calcium chloride/bromide (to 15.1 ppg)	X				X			W	SH	
BHI	HYCAL III	Liquid calcium chl./bromide/zinc bromide (19.2 ppg)					X			W	SH	
BHI	HYCAL IIISB	Liquid calcium/zinc bromide (to 19.2 ppg)					X			W	SH	
BHI	HYCAL IISB	Liquid calcium bromide (to 15.3 ppg)	X				X			W	SH	
BHI	KEM-SEAL	Copolymer for high-temp. filtration control	X	X	X	X	X	X		FR	TE	HPWB
BHI	KEM-SEAL PLUS	Copolymer for FR in extreme high-temp	X	X	X	X	X	X		FR	TE	
BHI	KOMPRESS	Single sack lost circulation solution					X	X	X	LO	MLCM	HPHT
BHI	LATIBASE	Multifunctional base product for LATIDRILL system	X	X			X					
BHI	LATIMAGIC	Wellbore stabilizer and lubricant	X	X						SH	LU	
BHI	LATIRATE	Rate of penetration enhancer and lubricant for water-based fluids	X	X						LU	HPWB	
BHI	LATILUBE	High temperature lubricant	X	X						LU	HTHP	MLCM
BHI	LC-GLIDE	Spherical synthetic graphite for torque and drag reduction	X	X	X	X	X	X	X	LU	LO	
BHI	LC-LUBE PLUS	Sized, synthetic graphite	X	X	X	X	X	X	X	LO	LU	
BHI	LC-LUBE	Sized, synthetic graphite	X	X	X	X	X	X	X	LO	LU	
BHI	LC-LUBE FINE	Sized, synthetic graphite	X	X	X	X	X	X	X	LO	LU	

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems								Product Function		
			Water-based fluids						Oil-based Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt					
BHI	LD-8	Non-hydrocarbon defoamer for water-based fluids	X	X	X	X	X	X			D		
BHI	LD-9	Defoamer for both fresh and saltwater drilling fluids	X	X	X	X	X	X			D		
BHI	LD-10	Low Cost Silicon Defoamer	X	X									
BHI	LIGCO	Ground leonardite	X	X	X	X	X				FR	TH	
BHI	LIGCON	Cauticized leonardite filtration reducer	X	X			X	X			FR	T	HPHT
BHI	LUBE-622	Water-based mud LU	X	X		X	X	X			LU		HPHT
BHI	LUBRI-GLIDE COARSE	Spherical CPC friction reducer	X	X			X	X	X				
BHI	LUBRI-GLIDE FINE	Spherical CPC friction reducer	X	X			X	X	X		LU		
BHI	MAGMA-GEL	Viscosifier for extreme HPHT emulsion systems						X	X		V	FR	HPHT
BHI	MAGMA-GEL SE	Suspension enhancer for extreme HPHT emulsion systems						X	X		V	FR	HPWB
BHI	MAGMA-SEAL	Fluid loss additive for extreme HPHT applications						X	X		FR	HPHT	HPWB
BHI	MAGMA-TROL	Polymeric fluid loss additive for extreme HPHT emulsion systems						X	X		FR	HPHT	HPWB
BHI	MAGMA-VERT	Emulsifier for extreme HPHT emulsion systems						X	X		E	FR	
BHI	MAGMA-VERT NS	UK CEFAS compliant HTHP emulsifier/wetting agent						X	X		E	HPHT	
BHI	MAX-GUARD	High performance clay hydration suppressant	X	X	X	X	X	X			SH		
BHI	MAX-PLEX	Aluminum/resin shale stabilizer for high performance WBM	X	X		X	X	X			SH	FR	
BHI	MAX-SHIELD	Deformable sealing polymer for high performance WBM	X	X	X	X	X	X	X	X	SH	LO	
BHI	MAX-TROL	HTHP filtration reducer for high performance WBM	X	X				X			FR	HPHT	
BHI	MD	Biodegradable drilling fluid detergent	X	X	X	X	X	X	X	X	SU	E	
BHI	MD II	Detergent/rig wash for general cleaning purposes	X	X				X	X	X	WBM		
BHI	MF-1	High molecular weight non-ionic selective flocculant									FL		
BHI	MICRO-CURE AF E2	Acid-free mesophase remediation									WBC		
BHI	MICRO-CURE E2	Mesophase remediation									WBC		
BHI	MICRO-PRIME	Mesophase cleaning spacer for OBM/SBM displacements									WBC		
BHI	MICRO-WASH	Open hole remediation of OBM/SBM filter cake									WBC		
BHI	MIL-BAR	Barite meeting API specs	X	X	X	X	X	X	X	X	W		RDF
BHI	MIL-BAR 410	Barite with 4.1 specific gravity	X	X	X	X	X	X	X	X	W		
BHI	MIL-BAR NA	Barite weighting agent	X	X	X	X	X	X	X	X	W		
BHI	MIL-BAR UF	Ultra fine grind barite	X	X				X	X	X	W		
BHI	MIL-BIO NS	Phosphonium sulfate biocide	X	X	X	X	X	X		X	B		
BHI	MIL-CARB SERIES	Multiple grind size series of calcium carbonate	X	X	X	X	X	X	X	X	LO	FR	
BHI	MIL-CEDAR FIBER	Shredded cedar bark	X	X	X	X	X	X			LO		
BHI	MIL-CLEAN	Water-soluble, biodegradable detergent concentrate	X	X	X	X	X	X	X	X	SU		
BHI	MIL-CLEAN E	Biodegradable cleaner/degreaser	X	X	X	X	X	X	X	X	P	V	
BHI	MIL-CLEAN SEA	North Sea approved rig wash detergent	X	X	X	X	X	X	X	X	SU	LO	
BHI	MILFLAKE	Shredded cellophane	X	X	X	X	X	X			LO		
BHI	MIL-GARD	H2S extractor (basic zinc carbonate)	X	X	X	X	X	X			CO		
BHI	MIL-GARD L	Sulfide scavenger	X	X	X	X	X	X			CO		
BHI	MILGEL	Wyoming bentonite meeting API specifications	X	X	X	X	X	X		X	V	FR	
BHI	MILGEL NT	Untreated (naturally high-yielding), API-spec Wyoming bentonite	X	X	X	X	X	X		X	V	FR	
BHI	MIL-GLIDE	Spherical copolymer bead lubricant for torque and drag reduction	X	X	X	X	X	X	X	X	LU		
BHI	MIL-GLIDE CP	Spherical glass bead lubricant for torque and drag reduction—avail in fine/coarse	X	X	X	X	X	X	X	X	LU		
BHI	MIL-GLIDE CP FINE	Fine spherical co-polymer drilling bead	X	X				X	X	X	LU		
BHI	MIL-GLIDE FINE	Fine grade spherical glass drilling bead	X	X				X	X	X	LU		
BHI	MIL-GRAPHITE	Natural graphite	X	X	X	X	X	X	X	X	LU	LO	
BHI	MIL-LUBE	Vegetable oil-based boundary and extreme pressure LU	X	X		X	X				LU	RDF	
BHI	MILMICA	Muscovite mica	X	X	X	X	X	X	X	X	LO		
BHI	MIL-PAC LV	Low-viscosity polyanionic cellulose	X	X	X	X	X				FR		
BHI	MIL-PAC LVT	Low-viscosity tech-grade polyanionic cellulose	X	X	X	X	X				FR		
BHI	MIL-PAC PLUS	Polyanionic cellulose that meets API specifications	X	X	X	X	X	X			FR	V	
BHI	MIL-PAC PLUS LV	Saltwater tolerant low-viscosity polyanionic cellulose that meets API specifications	X	X				X			FR		
BHI	MIL-PAC PLUS R	Saltwater tolerant polyanionic cellulose, regular viscosity	X	X				X			FR	V	
BHI	MIL-PAC R	Polyanionic cellulose, regular viscosity	X	X							FR	V	
BHI	MIL-PAC T	Technical grade polyanionic cellulose, regular viscosity, API spec	X	X							FR	V	
BHI	MIL-PAC ULV	Ultra-low viscosity polyanionic cellulose	X	X	X	X	X				FR		
BHI	MIL-PLUG	Ground nut shells	X	X	X	X	X	X	X	X	LO		
BHI	MIL-SEAL	Blended LCM product available in 3 grind sizes	X	X	X	X	X	X			LO		
BHI	MILSTARCH	Pre-gelatinized starch that meets API spec	X	X	X	X	X				FR	V	
BHI	MIL-TEMP	Contamination-resistant HPHT rheological stabilizer for WBM, > 500°F	X	X	X	X	X				TE	FR	
BHI	MP-COTE	Wetting agent for the MPRESS system							X		TH	SU	
BHI	MP-HOLD	Organoclay suspension agent in the MPRESS system							X		V		
BHI	MP-LIFT	Rheology modifier for the MPRESS system							X		V		
BHI	MP-LIFT UL	Rheology modifier for the MPRESS system in select applications							X		V		



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Available from:	Product tradename	Description of material	Non-oil-based	Dispersed	Calcium	Polymer	Low solids	Saturated oil-based	Synthetic	Air, mist, foam	Primary	Secondary	Secondary
BHI	MP-MUL	Emulsifier for the MPRESS system						X			E		
BHI	MUDZYME S	Enzymes to degrade starch in filter cakes									BR		SB
BHI	MUDZYME X	Enzymes to degrade xanthan gum in filter cakes									BR		V
BHI	MUL 4006	Economical HP emulsifier for SE Asia						X	X		E		
BHI	MUL 4007	Economical HP emulsifier for SE Asia						X	X		E		
BHI	MUL-FREE RS	Non-emulsifying surfactant	X					X			SU	RDF	
BHI	NANOSHIELD	Polymer for extreme wellbore stability	X	X				X	X	X	HPWB	SH	
BHI	NAVI-LUBE	Low pour-point lubricant (-15°F/-26°C)	X	X							LU	SH	
BHI	NEW-DRILL LV STICKS	Low Viscosity PHPA polymer in stick form	X	X				X			SH	WBM	
BHI	NEW-DRILL STICKS	PHPA polymer in stick form	X	X				X			SH	WBM	
BHI	NEW-DRILL	Liquid high molecular weight PHPA for encapsulation and shale control	X	X		X	X	X			SH	V	
BHI	NEW-DRILL HP	Powdered high molecular weight PHPA for encapsulation and shale control	X	X		X	X	X			SH	V	
BHI	NEW-DRILL LV	Low-viscosity, powdered PHPA	X	X		X	X	X			SH	SH	
BHI	NEW-DRILL PLUS	Concentrated, powdered high MW PHPA	X	X		X	X	X			SH	SH	
BHI	NEW-THIN	Synthetic defloculant	X	X		X	X	X		X	TH	FR	
BHI	NEW-TROL	Sodium polyacrylate filtration reducer	X	X		X	X	X			FR		
BHI	NEW-VIS	A polymeric viscosifying agent for freshwater and brines	X	X				X			V		
BHI	NEXT-BASE eC	Synthetic, biodegradable base oil								X	SB		
BHI	NEXT-SEAL	HTHP Filtration/seepage loss control agent for emulsion drilling fluids						X	X		FR	LO	
BHI	NEXT-HOLD	Organoclay suspension agent in the NEXT-DRILL system								X	V		
BHI	NEXT-LIFT	Rheology modifier for the NEXT-DRILL system								X	V		
BHI	NEXT-LIFT UL	Rheology modifier for the NEXT-DRILL system in select applications								X	V		
BHI	NEXT-MUL	Primary emulsifier for the NEXT-DRILL system								X	E		
BHI	NF2	Gas hydrate inhibitor	X	X	X	X	X	X			SU		
BHI	NoCal I	Liquid sodium chloride (to 10.0 ppg)						X			W		
BHI	NoCal II	Liquid sodium chloride/bromide (to 12.8 ppg)						X			W		
BHI	NoCal IISB	Liquid sodium bromide (to 12.8 ppg)						X			W	SH	
BHI	NoCal Br Frac Brine	Liquid sodium bromide (to 12.5 ppg)						X			W	SH	
BHI	NoCal K	Liquid potassium chloride (to 9.7 ppg)						X			W	SH	
BHI	NOXYCOR	Corrosion inhibitor for water based and air/mist/foam drilling applications	X	X				X		X	CO		
BHI	NOXYGEN L	Liquid oxygen scavenger	X	X	X	X	X	X			CO		
BHI	NOXYGEN NA	Liquid oxygen scavenger - sodium bisulfite	X	X	X	X	X	X			CO		
BHI	NOXYGEN XT	Organic oxygen scavenger						X			CO		
BHI	OHR AC	Acid corrosion control for the MICRO-WASH System									CO		
BHI	OHR GACI	Acid corrosion control for MICRO-WASH-environ. safe									CO		
BHI	OMNI-COTE	High performance wetting agent							X	X	SU	TH	
BHI	OMNIFLOW DIF	Synthetic based drill-in fluid							X	X	RDF	LU	
BHI	OMNI-LUBE	Lubricant for invert emulsion drilling fluids						X	X		FR		
BHI	OMNI-LUBE V2	North Sea compliant lubricant for emulsion systems						X	X		LU		TE
BHI	OMNI-MUL	Non-ionic E and secondary wetting agent						X	X		E	SU	
BHI	OMNI-MUL 2	Emulsifier for synthetic drilling fluids						X	X		E		TE
BHI	OMNI-PLEX	High-performance, anionic, synthetic polymer						X	X		V		
BHI	OMNI-TEC	Anionic emulsifier							X	E	FR	HPWB	
BHI	OMNI-VERT	Supplemental emulsifier							X		E	FR	
BHI	PACK-MUL	Wetting agent for OMNI-PACK system									SU		V
BHI	PENETREX	ROP enhancer and anti-bit balling/accretion additive	X	X		X	X	X			SU	LU	V
BHI	PENETREX NS	ROP enhancer—designed for North Sea applications	X	X		X	X	X			SU	LU	
BHI	PERFFLOW CM	Drill-in fluid—customized bridging	X			X	X	X			RDF	FR	
BHI	PERFFLOW DIF	Drill-in fluid	X			X	X	X			RDF	FR	
BHI	PERFFLOW LD	Low Density Drill-in Fluid		X				X			RDF		
BHI	PERMA-LOSE HT	Non-fermenting API-spec starch for FR	X	X		X	X	X			FR	V	SH
BHI	PLUG-LIFT	Multi-stage composite frac plug drill-out system							X		WBC		
BHI	PLUG-DRILL FR	Plug Drill-Out System (Plug Lift) Friction Reducing Additive	X	X				X			LU		
BHI	PLUG-DRILL LX	Plug Drill-Out System (Plug Lift) Viscosifier	X	X				X			V		
BHI	PLUG-DRILL FR HT	Plug Drill-Out System (Plug Lift) Friction Reducing Additive for high temps									LU		
BHI	PLUG-DRILL LUBE	Plug Drill-Out System (PLUG Lift) Lubricant									LU		
BHI	PLUG-GARD	Plug Drill-Out System (Plug Lift) H2S Scavenger											
BHI	POTASSIUM FORMATE	Liquid or dry potassium formate (to 13.3 ppg)	X					X			W	TE	
BHI	PRIME 100	Wellbore clean-up additive									WBC		
BHI	PRIME 200HT	Wellbore cleaning product for high temperature displacements						X			WBC	HTHP	
BHI	PRIME 759	Wellbore spacer additive									WBC	D	
BHI	PRIME 770	Wellbore spacer additive									WBC		
BHI	PRIME VIS HT	Viscosifier for high temperature displacements						X			V	HPHT	HPHT
BHI	PROTECTOMAGIC M	Water-dispersible, air-blown asphalt for shale stability and lubrication	X	X	X	X	X	X			SH	LU	
BHI	PYRO-TROL	FR and lubricant in HPHT water-based applications	X	X		X	X				FR	TE	
BHI	QUICK VIS	Liquid HEC for non-formate brines	X			X	X	X			V	FR	
BHI	QUICK VIS HT	Viscosifier for completion fluids	X			X	X	X			V	FR	
BHI	RHEO-CLAY	Fast yielding organophilic clay for the RHEO-LOGIC system							X	X	V		

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**LO** = Lost circulation additives  
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**MLCM** = Massive lost circulation material

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**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
BHI	RHEO-CLAY PLUS	Temperature-stable organophilic clay							X	X		V	HTHP	
BHI	RHEO-LINE HT	Rheology modifier for the RHEO-LOGIC system								X		V		
BHI	RHEO-SWEEP	Viscosifier for use in invert emulsion hi-vis sweeps							X	X		V		
BHI	SHALE-BOND	Water-dispersible, naturally-occurring asphalt	X	X		X	X	X				SH	LU	SB
BHI	SHALE-PLEX	Aluminum complex for shale stability	X	X		X	X					HPWB	SH	SB
BHI	SODIUM FORMATE	Liquid or dry sodium formate (to 11.0 ppg)	X				X					W	TE	SB
BHI	SOLUFLAKE	Flaked calcium carbonate	X	X		X	X	X	X	X		LO	MLCM	
BHI	SOLUFLAKE D COARSE	Graded flaked calcium carbonate for control of lost circulation	X	X				X	X	X		LO	WBM	
BHI	SOLUFLAKE D FINE	Graded flaked calcium carbonate for control of lost circulation	X	X				X	X	X		LO	WBM	
BHI	SOLUFLAKE D MEDIUM	Graded flaked calcium carbonate for control of lost circulation	X	X				X	X	X		LO	WBM	
BHI	SOLU-SQUEEZE	Acid-soluble, high fluid loss squeeze	X	X	X	X	X	X	X		LO			
BHI	SS-10	H2S remover/stabilizer						X				CO		
BHI	SULFATROL	Sulfonated asphaltic material	X	X				X				SH		
BHI	SULFATROL XCEED	High performance sulfonated asphaltic material	X	X				X				SH	HPHT	
BHI	SUPER INSULGEL	Thermal insulating packer fluid (blend of fluids and additives)	X		X	X		X				HS	TE	
BHI	SUPER-COL	Extra-High-yield bentonite	X				X				X	V	FR	
BHI	SURF-COTE	Economical wetting agent						X				SU	TH	
BHI	TEKPLUG XL	Temp. fluid-loss control agent for completion fluids	X	X		X	X	X				LO	V	
BHI	TEKPLUG XL HD	Temp. fluid-loss control agent for high density completion fluids	X	X		X	X	X				LO	V	
BHI	TEQ-LUBE II	Water-soluble LU	X	X		X	X	X				LU	RDF	
BHI	TERRA-COAT	Deformable sealing polymer for shale stability in the TERRA-MAX system	X	X	X	X	X		X	X		SH	LO	
BHI	TERRA-RATE	ROP enhancer for the TERRA-MAX system	X	X		X	X	X				SU	LU	FR
BHI	THERMO PLUG II	Temp. fluid-loss control agent	X	X		X	X	X				LO	V	
BHI	ULTRA SATURATED SALT DKD FLUID, 16 PPG 220 SALT		X	X				X						Patent new application
BHI	ULTRA SATURATED SALT DKD FLUID, 16 PPG 110 SALT		X	X				X						Patent new application
BHI	ULTRA VIS	Liquid HEC for non-formate brines	X			X		X				V	WBC	CF
BHI	UNI-CAL	Highly effective thinner for fresh and salt systems		X	X			X				TH	FR	CF
BHI	UNI-CAL CF	Lignosulfonate with no chrome added			X	X		X				TH	FR	
BHI	W.O. 21 LE PLUS	Liquid HEC in environmentally friendly base			X			X				V		RDF
BHI	W.O. 21L	Liquid HEC viscosifier for workover fluids					X	X				CF		
BHI	W.O. 21LE	Liquid HEC - environmentally safe					X	X				CF		
BHI	W.O. 21LE PLUS	High-yield liquid HEC for workover fluids - enviro.					X	X				CF	V	V
BHI	W.O. 30	Sized, ground calcium carbonate (fine, med, coarse)	X	X	X	X	X	X	X	X		W	LO	
BHI	W.O. 30 SUPERCOARSE	Calcium carbonate	X	X	X	X	X	X	X	X		LO	W	
BHI	W.O. DEFOAM	Alcohol-based compound for defoaming water-based fluids	X	X		X	X	X				D		
BHI	W-306	Polymer additive to PERFFLOW system	X			X	X	X				V	FR	RDF
BHI	W-313	Polymer additive to PERFFLOW system	X			X	X	X				V	FR	RDF
BHI	WELL WASH 100	Displacement surfactant to remove water-based fluids	X	X	X		X	X				WBC	SU	
BHI	WELL WASH 120	Displacement surfactant to remove water-based fluids	X	X	X	X	X	X				WBC		
BHI	WELL WASH 2000	Surfactant blend to remove oil-based and synthetic-based fluids	X	X	X		X		X	X		WBC	SU	
BHI	WELL WASH 2020	Displacement surfactant for oil and synthetic-based fluids	X	X	X	X	X	X	X	X		WBC		
BHI	XAN-PLEX C	Clarified xanthan gum polymer	X	X	X	X	X	X				V	RDF	
BHI	XAN-PLEX D	Xanthan gum polymer with dispersant meeting API-spec for viscosity	X	X	X	X	X	X				V	RDF	
BHI	XAN-PLEX L2	Liquid xanthan gum polymer for fast mixing	X	X		X	X	X				V	RDF	V
BHI	XCD POLYMER	Dry xanthan biopolymer	X			X	X					X	B	
BHI	X-CIDE 102	Glutaraldehyde bactericide	X	X	X	X	X	X				W	B	
BHI	X-CIDE 102	Biocide	X	X	X	X	X	X				X	B	
BHI	X-CIDE 105	Glutaraldehyde bactericide concentrate	X	X	X	X	X	X				X	B	TH
BHI	X-CIDE 207	Isothiazolone-based biocide-powder	X	X	X	X	X	X				X	B	
BHI	XL STABILIZER	Drill-in/Completion fluid buffer	X			X	X	X				A	FR	
BHI	X-LINK	Cross-link polymer system	X	X	X	X	X	X	X	X		LO	MLCM	
Black Earth	BLACKEARTH HUMALITE	Weathered sub-bituminous coal, similar to leonardite or weathered lignite	X	X	X	X	X	X				LU	TE	
Boysenblue	BLEN-CARB	Calcium carbonate	X	X	X	X	X	X	X			LO	P	
Boysenblue	BLEN-FYBER	High-strength micronized cellulose fiber to prevent/cure seepage loss	X	X	X	X	X	X	X			LO	P	
Boysenblue	BLEN-NO FOAM	Defoamer	X	X	X	X	X	X			X	D		
Boysenblue	BLEN-PLEX	Multivalent ion, polymer crosslinking agent	X	X	X	X	X	X				LO	A	
Boysenblue	BLEN-PLUG	Mixed coarse cellulose fibers	X	X	X	X	X	X	X			LO		
Boysenblue	BLEN-SEAL	Preabsorbed, high-strength micronized cellulose fibers with low-toxicity lubricant	X	X	X	X	X	X	X			LO	P	
Boysenblue	BLEN-SQUEEZE	Cellulose LCM w/crosslinkable polymer	X	X	X	X	X	X		X		LO	V	
Boysenblue	BORESEAL	Mineral fiber blended with pore blocking material	X	X	X		X	X				LU		
Boysenblue	FRAC-PAK	High-solids, high fluid-loss LCM	X	X	X	X	X	X	X	X		LO		
Boysenblue	HYDRASWELL	After spotted, material swells to seal fractures and voids	X	X	X	X	X	X	X	X		LO		
Boysenblue	MEGA-SLIDE	Glass beads specifically for use in slide and horizontal drilling (14–20 mesh)	X	X	X	X	X	X	X	X		LU		SH

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Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based Oil-based			
								Air, mist, foam, gas			
Boysenblue	SPUD-SEAL	Selected size cellulose fibers blended with non-damaging water-soluble polymers	X	X	X	X	X	X	LO	V	
Boysenblue	SUPER-SLIDE "F"	Spherical glass beads (170–325 mesh) to reduce torque and drag	X	X	X	X	X	X	LU	HPHT	
Boysenblue	SUPER-SLIDE "M"	Spherical glass beads (20–40 mesh) to reduce torque and drag	X	X	X	X	X	X	LU	HPHT	
Boysenblue	WALL-GUARD Bri-Chem	Water-soluble additives	X	X	X	X	X		LU	FR	
Cabot	CESIUM ACETATE	HPHT well suspension brine to 19.3 ppg	X		X	X	X	X	CF	HPHT	
Cabot	CESIUM FORMATE	Drill-in and completion brine to 19.3 ppg	X		X	X	X	X	CF	RDF	
Cabot	POTASSIUM FORMATE	Drill-in and completion brine to 13.1 ppg	X		X	X	X	X	CF	RDF	
Carless	CLAIRSOL 350M HF	Low-toxicity oil-based (low viscosity)						X	LU		
Carless	CLAIRSOL 370	< 1% aromatic oil-based						X	LU		
Carless	CLAIRSOL NS	Very Low-toxicity oil-based						X	LU		
Carless	CLAIRSOL NS-P	Ultra low aromatic oil-based						X	LU		
Cebo	CEBO PG 63	Hematite	X	X	X	X	X	X	W		
Cebo	CEBOBAR	Barite	X	X	X	X	X	X	W		
Cebo	CEBODOL	Dolomite	X	X	X	X	X	X	W		
Cebo	CEBOFLAKES	Calcium carbonate flakes	X	X	X	X	X	X	LO		
Cebo	CEBOGEL API	European bentonite	X	X	X	X	X	X	V	FR	
Cebo	CEBOGEL OCMA	European bentonite	X	X	X	X	X	X	V	FR	
Cebo	CEBOGEL WYOMING	Wyoming bentonite	X	X	X	X	X	X	V	FR	
Cebo	CEBOMICA	Mica	X	X	X	X	X	X	LO		
Cebo	CEBONUTSHELLS	Nutshells	X	X	X	X	X	X	LO		
Cebo	CEBOSALT	Salt	X	X	X	X	X	X	SH		
Cebo	CEBOSEAL	Sealant	X	X	X	X	X	X	LO		FR
Cebo	CEBOSWDC	Saltwater drilling clay	X	X	X	X	X	X	V		LU
Cebo	CEBOTHinner	Calcium lignosulfonate	X	X	X	X	X	X	TH		FR
Cebo	CEBOBAR UF	Barite, ultra fine	X	X	X	X	X	X	W		
Cesco	CESCO CG	Pre-treated gilsonite	X	X	X	X	X	X	SH		LU
Cesco	CESCO COUPLER	Surfactant wetting agent for gilsonite and asphalts	X	X	X	X	X	X	SH		SH
Cesco	CESCO GILSONITE	Natural safe SH	X	X	X	X	X	X	SH		LU
Chemjet	Gilsocol DG	Dispersable Grade gilsonite	X	X	X	X	X	X	HTHP		
Chemjet	Gilsocol GP	General Purpose gilsonite						X	X	HTHP	
Chemjet	Jet 7 Seal	A Loss Circulation Fluid loss control material selectively sized to achieve a wide range particle distribution for plugging porous formations and reducing torque in water based and oil based systems.						X	X	LCM	
Chemjet	Jet Base 360	Highly-Refined Drilling Fluid Base Oil						X	SB	HPHT	
Chemjet	Jet Base 400	Olefin-Ester -O- BTEX Synthetic Base Fluid						X	SB	HPHT	
Chemjet	Jet Black	Shale Stabilizer/Lubricant for Water Based Drilling Fluids	X	X	X	X	X	X			
Chemjet	Jet Carb (242, 70, 42, 38 Grades)	An acid soluble calcium carbonate bridging and weighting agent used to control fluid loss and lost circulation. Four grades are available.	X	X	X	X	X	X	HTHP	LCM	
Chemjet	Jet Carbo Seal (F, M, & C Grades)	A proprietary carbon product selectively sized for optimum particle size distribution to plug downhole porous formations. This product is inert and temperature stable in oil based and water based systems. Three sized products are available.	X	X	X	X	X	X	HTHP	LCM	
Chemjet	Jet Ceramic Beads										
Chemjet	Jet Cide 250	Glutaraldehyde-Based Organic Micro-Biocide	X	X	X	X	X	X			
Chemjet	Jet D Foam A	Alcohol Defoamer	X	X	X	X	X	X			
Chemjet	Jet D Foam Si	Premium Silicone Defoamer	X	X	X	X	X	X			
Chemjet	Jet Drill Beads (F&C)	Polymerized Round Spheres	X	X	X	X	X	X	LU	LCM	
Chemjet	Jet Drill MD	Drilling Mud Detergent	X	X	X	X	X	X			
Chemjet	Jet Dym 20	Trimer Acid						X	X		
Chemjet	Jet Dym 40	Trimer Acid						X	X		
Chemjet	Jet Dym 90	Dimer Acid						X	X		
Chemjet	Jet EB HT	Hi-Temp Encapsulated Breaker									
Chemjet	Jet EB LT	Low-Temp Encapsulated Breaker									
Chemjet	Jet E-Spot	Highly effective water-dispersible, low toxicity pipe freeing agent	X	X	X	X	X	X	LU		
Chemjet	Jet Fiber (F, M, & C Grades)	An organic biodegradable loss circulation and Seepage control material used to bridge and seal permeable formations in water, oil and synthetic base mud systems. This product reduces torque and drag within high differential pressure zones. These products are sized for optimal particle size distribution. There are three grades available.	X	XX	X	X	X	X	LCM		
Chemjet	Jet Flocc 1980	Anionic Flocculant	X	X	X	X	X	X			
Chemjet	Jet Flocc 20-A	Environmentally Friendly Water-Base Additive for Drill-In & Completion Fluids	X	X	X	X	X	X			
Chemjet	Jet Flocc Dry	High molecular weight clarifier for industrial waste waters and sludge reconditioning	X	X	X	X	X	X			
Chemjet	Jet Flocc Plus	High performance water clarifier for frac water and sludge reconditioning	X	X	X	X	X	X			
Chemjet	Jet Flocc Pro	Cross-Linked High Molecular Weight Cationic Flocculant	X	X	X	X	X	X			
Chemjet	Jet Foam 35	Cocobetaine Fresh Water Drilling Foamer	X	X	X	X	X	X			
Chemjet	Jet Foam HF	High-Foaming Anionic Surfactant for drilling	X	X	X	X	X	X			
Chemjet	Jet FR 102	Highly effective friction reduction agent									
Chemjet	Jet FR 8012	Rapid Hydration Anionic Polymer									
Chemjet	Jet Gel 4.0	Liquid Guar Slurry									
Chemjet	Jet Graphite (F, M, & C)	Is amorphous graphite used in controlling Seepage and Circulation losses with an added lubricating benefit reducing torque and drag. Three grades are available.	X					X	X	LCM	LU
Chemjet	Jet Hib 5000	Hydrogen Sulfide Scavenger for Water	X	X	X	X	X	X	X	CO	

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**CA** = Calcium removers  
**CF** = Completion fluid  
**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based Oil-based			
								Air, mist, foam, gas			
Chemjet	Jet Hib 5049	Hydrogen Sulfide Scavenger for Oil	X	X	X	X	X	X			
Chemjet	Jet Hib 5426	Filming amine for both CO2 and H2S Corrosion	X	X	X	X	X	X			
Chemjet	Jet Hib 5431	Corrosion Inhibitor	X	X	X	X	X	X			
Chemjet	Jet Hib 5432	Water-Soluble Oxygen Scavenger	X	X	X	X	X	X			
Chemjet	Jet Hib 5434	Corrosion Inhibitor & Oxygen Scavenger	X	X	X	X	X	X			
Chemjet	Jet Hib 5434B	3-in-1 (Corrosion Inhibitor, Oxygen Scavenger, Biocide)	X	X	X	X	X	X			
Chemjet	Jet Hib 5560	Medium to High Temp Acid Corrosion inhibitor	X	X	X	X	X	X			
Chemjet	Jet Kleen 500	Rig Wash									
Chemjet	Jet Kleen 550	Environmentally Friendly Well-Bore Cleaner									
Chemjet	Jet Kleen Spot	Water-Dispersible Pipe-Freeing Agent									
Chemjet	Jet Lube 175	Ester Lube for Fresh Water	X	X							
Chemjet	Jet Lube 185	Ester Lube for Fresh Water	X	X							
Chemjet	Jet Lube 275	Ester Lube for Brine Water						X			
Chemjet	Jet Lube 280	Ester Lube for Brine Water						X			
Chemjet	Jet Lube 373 (3 active versions)	Effective and Economical Fresh Water Lubricant	X	X	X	X	X	X			
Chemjet	Jet Lube EN28	ROP Rate of Penetration Enhancer	X	X	X	X	X	X			
Chemjet	Jet ROPE	ROP Rate of Penetration Enhancer & Viscosity Reducer	X	X	X	X	X	X			
Chemjet	Jet Lube I	Ester Lube for Fresh Water	X	X	X	X	X	X			
Chemjet	Jet Lube II	Ester Lube for Brine Water						X			
Chemjet	Jet Lube OBM	Specialty Lubricant for diesel base mud systems						X	X		
Chemjet	Jet Lube V	Economical Brine Lubricant	X	X							
Chemjet	Jet Lube VP	Drilling Lubricant for Brine Fluids(higher temp)						X			
Chemjet	Jet Lube X	Horizontal Drilling Lubricant for "Bakken" Brines						X			LU
Chemjet	Jet Lube XL	Extreme Condition Horizontal Drilling Lubricant for "Bakken" Brines						X			LU
Chemjet	Jet Lube XPG	Pipe on Pipe & Drilling Lubricant/Ester-Based for WBM/OBM/SBM	X	X	X	X	X	X			LU SH SH
Chemjet	Jet Max Conc	KCL Substitute / Clay Stabilizer	X								SE
Chemjet	Jet Mod Gel	Yield Point Elevating Gellant for Invert Emulsion Muds									
Chemjet	Jet Mod LE-TA	Low End Rheology Modifier									
Chemjet	Jet Mul 101	Primary Emulsifier for OBM						X	X		E SU
Chemjet	Jet Mul 102	Secondary Emulsifier for OBM						X	X		E SU
Chemjet	Jet Mul 111	Primary Emulsifier for SBM						X			E SU
Chemjet	Jet Mul 112	Secondary Emulsifier for SBM						X			E SU
Chemjet	Jet No Foam	Glycol Defoamer	X	X	X	X	X	X			
Chemjet	Jet OM Seal	A multi-blended product designed to plug fine to medium fractures within loss circulation zones in both water based and oil based systems.							X	X	LCM
Chemjet	Jet One Mul	All-in-One Emulsifier							X	X	E SU
Chemjet	Jet Organo Clay 300	Drilling Fluid Viscosifier for OBM							X		VIS
Chemjet	Jet Organo Clay 400	Drilling Fluid Viscosifier for SBM							X		VIS
Chemjet	Jet PAC LV	Low Viscosity Polymeric Cellulose	X	X	X	X	X	X			FL
Chemjet	Jet PAC R	High Viscosity Polymeric Cellulose	X	X	X	X	X	X			VIS
Chemjet	Jet PHPA 30L	Anionic PHPA; Drilling Mud Additive	X	X	X	X	X	X			FL SE
Chemjet	Jet PHPA 41E	Nonionic PHPA; Drilling Mud Additive	X	X	X	X	X	X			VIS FL SE
Chemjet	Jet Seal (F & C Grades)	An engineered LCM product made up of flake, granular and fiber materials that work well in a wide variety of situations and can be used in water-based and oil-based drilling fluids. This product forms a bridge and packs off around the bridge to create the final seal. Jet Seal can be used to reduce severe lost circulation as well as control seepage losses. There are two sized products available.	X	X					X	X	LCM
Chemjet	Jet Slide 250	Pipe on Pipe, Multi-Phase Beaded Lubricant for Coiled-Tubing									LU
Chemjet	Jet Slide 750	Pipe on Pipe, Multi-Phase Beaded Lubricant	X	X	X	X	X	X			LU
Chemjet	Jet Space III	Highly concentrated cleaning spacer with strong water wetting characteristics									
Chemjet	Jet Spot	Spotting Fluid	X	X	X	X	X	X			P
Chemjet	Jet Squeeze 101	A high solids high fluid loss squeeze product. Rapid loss of filtrate forms a solids plug within the fractures of loss zones.	X	X					X	X	Squeeze
Chemjet	Jet Squeeze Plus	A high solids high fluid loss squeeze product with additional bridging and sealing agents. The bridging and sealing agents aid in strengthening the filter cake plug within the fractures of loss zones.	X	X					X	X	Squeeze
Chemjet	Jet Syn Thin	Thinner for Synthetic-Based Drilling Fluids									
Chemjet	Jet Thin	Thinner for Oil-Based Drilling Fluids							X	X	SB
Chemjet	Jet Treat 250 Antifoulant	Brine soluble anti-foulant with excellent corrosion and biocidal properties	X	X	X	X	X	X			
Chemjet	Jet Trol Plus	Sulphonated Asphalt	X	X					X		FL HTHP
Chemjet	Jet Vis (Jet HEC)	Liquid HEC Slurry in environmentally-friendly carrier fluid	X	X							VIS
Chemjet	Jet Vis Cryl	Rheology Modifier + Viscosifier (great for clay-free mud systems)							X	X	VIS
Chemjet	Jet Wet 104	Wetting Agent for OBM							X	X	E SU
Chemjet	Jet Wet 114	Wetting Agent for SBM							X		
Chemjet	Jet Xan L (different loading options available)	Liquid Xanthan Gum	X	X	X	X	X	X			VIS
Chemjet	Jet Xan Kleen (different loading options available)	Liquid Xanthan Gum for Off-Shore	X	X	X	X	X	X			VIS

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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based Synthetic-based	Primary	Secondary
Chemjet	Pecan Shell (F, M, & C Grades)	A granular nut shell selectively sized for lost circulation control and is available in three grades.	X	X				X	X	LCM
Chemjet	Super G	Extreme High Temperature gilsonite			X			X	X	HTHP
Chemjet	Walnut Shell (F, M, C, & B Grades)	A granular nut shell selectively sized for lost circulation control and is available in four grades.	X	X	X			X	X	LCM
Chemjet	Jet Xan D (13, 15, and 16)	Dispersable Grade dry xanthan gum								
Chemjet	Jet Xan ND (13, 15, and 16)	Non-dispersable grade dry xanthan gum								
Chemjet	Jet Scale 4910	Phosphonate scale inhibitor for water systems with high calcium levels								
Chemjet	Jet Scalp	Aqueous solution for water treatment and cleaning agent								
ChemSol	CARBOXSOL HV	High-viscosity carboxymethyl cellulose	X	X	X	X	X			
ChemSol	CARBOXSOL LV	Low-viscosity carboxymethyl cellulose	X	X	X	X	X			
ChemSol	CHEM SPA	Sodium polyacrylate fluid loss reducer	X	X	X	X	X			
ChemSol	CHEM ZAN D	Dispersible xanthan gum	X	X	X	X	X			
ChemSol	CHEM ZAN D PLUS	High purity dispersible xanthan gum	X	X	X	X	X			
ChemSol	CHEMSOL CAUSTIC	Caustic soda beads, alkalinity control								
ChemSol	CHEMSOL DRILL BEADS	Polymer, ceramic, glass, drilling beads	X	X	X	X	X	X		
ChemSol	CHEMSOL KOH	KOH, alkalinity control, potassium ion source								
ChemSol	CHEMSOL PPG	Non-toxic glycol-based shale inhibitor and lubricant			X	X	X	X		
ChemSol	CHEMSOL-AS	Aluminum stearate defoamer	X	X	X					
ChemSol	CHEMSOL-BICARB	Bactericide, calcium reducer, alkalinity control								
ChemSol	CHEMSOL-CITRIC ACID	Alkalinity control, polymer stabilizer								
ChemSol	CHEMSOL-EDTA	Chelating agent for scale removal and stimulation	X							
ChemSol	CHEMSOL-NA4	Chelating agent for scale removal and stimulation	X							
ChemSol	DYNADRILL AN	Dry PHPA	X	X		X	X	X		
ChemSol	DYNADRILL L	30% liquid PHPA	X	X		X	X	X		
ChemSol	FINE SEAL	Fibrous nutshell fines for seepage control								
ChemSol	GLYSOL LUBRICANT	Enviro-safe lubricant, glycerin-based	X	X	X	X	X	X		
ChemSol	PAC SOL LV	Low-viscosity premium PAC	X	X	X	X	X	X		
ChemSol	PAC SOL R	High-viscosity premium PAC	X	X	X	X	X	X		
ChemSol	PAC SOL THV	High-viscosity tech grade PAC	X	X	X	X	X	X		
ChemSol	PAC SOL TLV	Low-viscosity tech grade PAC	X	X	X	X	X	X		
ChemSol	POTASSIUM CHLORIDE	Shale stability/control								
ChemSol	SAPP	Sodium acid pyrophosphate	X	X		X	X			
ChemSol	SHELL-FILL	Fine, medium, coarse, ground pecan	X	X	X	X	X	X		
ChemSol	SHELL-FILL W	Fine, medium, coarse, ground walnut	X	X	X	X	X	X		
ChemSol	SODIUM THIOCYANATE	Corrosion inhibitor								
ChemSol	SOLPHALT	75% min. soluble sulfonated asphalt	X	X	X	X	X			
ChemSol	SOLPHALT L	30% liquid sulfonated asphalt	X	X	X	X	X			
ChemSol	STAROSOL CM	Carboxymethyl starch	X	X	X	X	X			
ChemSol	STAROSOL M	Modified yellow starch, fluid loss reducer	X	X	X	X	X			
ChemSol	STAROSOL N	Natural yellow starch, fluid loss reducer	X	X	X	X	X			
ChemSol	THIN - SOL CFLS	Chromite-free lignosulfonate			X	X	X	X		
ChemSol	THIN - SOL CLS	Chromite lignosulfonate			X	X	X	X		
ChemSol	THIN - SOL FCLS	Ferro chrome lignosulfonate			X	X	X	X		
ChemSol	UCARCIODE	Biocide	X	X	X	X	X	X		
Chemstar	DRILSTAR HT	Pre-gel white starch	X	X	X	X	X			
Chemstar	DRILSTAR P	Pre-gel white potato starch	X	X	X	X	X			
Chemstar	DRILSTAR Y	Pre-gel starch	X	X	X	X	X			
Chemstar	EXSTAR	High TE starch for brine-based fluids	X	X	X	X	X			
Chemstar	EXSTAR HT	V and fluid-loss control in brine, silicates	X	X	X	X	X			
Chemstar	GLUCODRILL-IN	Non-ionic starch ether								
Chemstar	STARLOSE	Non-fermenting pre-gel starch	X	X	X	X	X			
Chemstar	STARLOSE C-100	Non-fermenting pre-gel starch	X	X	X	X	X			
Chemstar	STARLOSE P-100	Non-fermenting pre-gel starch	X	X	X	X	X			
Chemstar	STARPAK	Polyionic starch ether	X	X	X	X	X			
Chemstar	STARPAK DP	Hydroxyalkylated, complexed, polyionic starch ether	X	X	X	X	X			
Chemstar	STARPAK EXTREME	Hydroxyalkylated, complexed, polyionic starch ether for high temp.	X	X	X	X	X			
Chemstar	STARPAK II	Complexed, polyionic starch ether	X	X	X	X	X			
Chincola	ULTRAGEL 7C 90	Bentonite OCMA/API specs	X	X	X	X	X			
Clariant	ANTIMUSSOL FN	Anti-foam - PPG-based	X	X	X	X	X			
Clariant	ANTIMUSSOL TIP	Defoamer - Phosphate ester	X	X	X	X	X			
Clariant	ANTIMUSSOL TW	Anti-foam - biodegradable	X	X	X	X	X			
Clariant	CORRTREAT 2807	Acid corrosion inhibitor								
Clariant	DISPERSOGEN 4362	Dispersant/anti sludge agent								
Clariant	DISPERSOGEN R5	PMS type dispersant in powder form								
Clariant	DISSOLVAN 3252	Non-emulsifier								
Clariant	DISSOLVAN 4411	Non-emulsifier								
Clariant	DODIGEN 5594	Corrosion inhibitor - water-soluble				X	X			
Clariant	DODIGEN 5594	Brine corrosion inhibitor								
Clariant	DODILUBE 4861	Lubricant - fatty acid derivative								
Clariant	DODILUBE 4940	Lubricant - fatty acid derivative								
Clariant	ECOTREAT 9397	Environmentally friendly OBM single emulsifier								
Clariant	GENAPOL LRO	Foamer - Sodium laureth sulphate								
Clariant	GENAPOL PF 10	Eo/po block polymer								
Clariant	HORDAPHOS MDAH	Lubricant - phosphoric acid derivative								
Clariant	HORDAPHOS MDIT	Lubricant - phosphoric acid derivative								
Clariant	HOSTADRILL 4706	Synthetic HPHT fluid loss additive	X	X	X	X	X			

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**CA** = Calcium removers  
**CF** = Completion fluid

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**FR** = Filtrate reducers  
**FL** = Flocculants  
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**HPHT** = High pressure/high temperature  
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**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
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**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanup  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based Synthetic-based	Primary	Secondary
Clariant	HOSTADRILL 5448	HPHT fluid loss additive						X		
Clariant	HOSTAMER 4707	Fluid loss additive						X		
Clariant	HOSTAPUR OS	Foamer - biodegradable liquid							X	
Clariant	HOSTAPUR OSB	Foamer - biodegradable flake								
Clariant	HOSTMER 5487	Liquid fluid loss additive and gas migration control						X		
Clariant	SURFTREAT 9167	OBM Inverse emulsifier						X	X	
Clariant	SURFTREAT 9173	Glycol blend shale inhibitor								
Coatex	COATEX FP 100	Acrylic polymer, high temp. dispersant	X	X	X	X	X			
Coatex	COATEX FP 101	High temp. dispersant for high-density muds	X	X	X	X	X			
Coatex	COATEX FP 30 S	High temp. TH for high-density muds	X	X	X	X	X			
Coatex	COATEX FP 31 S	High temp. TH for high-density muds	X	X	X	X	X			
CorsiTech	KLAY CL-II	Temporary clay stabilizer	X	X	X	X	X			
CorsiTech	PRODUCT 2003	Packer fluid CO	X	X	X	X	X			
CorsiTech	PRODUCT 2008	Solid-tolerant oxygen inhibitor	X	X	X	X	X			
CorsiTech	PRODUCT 2016	Low-end rheology modifier						X	X	
CorsiTech	PRODUCT 2047	Water-dispersible CO	X	X	X	X	X			
CorsiTech	PRODUCT 2069	H2S scavenger	X	X	X	X	X			
CorsiTech	PRODUCT 2077	CO for high O2 environment	X	X	X	X	X			
CorsiTech	PRODUCT 2078	Atmospheric filming CO	X	X	X	X	X			
CorsiTech	PRODUCT 239	Clay stabilizer for shale control	X	X						
CorsiTech	PRODUCT 269	Foaming agent	X	X						
CorsiTech	PRODUCT 300	Corrosion inhibitor	X	X	X	X	X			
CorsiTech	PRODUCT 47	Foaming agent / resists contamination	X	X	X	X	X			
CorsiTech	PRODUCT 5014	Iron-control sequestering agent	X	X	X	X	X			
CorsiTech	PRODUCT 6016	Primary oil mud E						X	X	
CorsiTech	PRODUCT 6050	Oil mud primary emulsifier						X	X	
CorsiTech	PRODUCT 6055	Concentrated pipe-freeing material	X	X	X	X	X			
CorsiTech	PRODUCT 6064	Drilling fluid lubricant	X	X	X	X	X			
CorsiTech	PRODUCT 6099	Drilling mud surfactant	X	X	X	X	X			
CorsiTech	PRODUCT 6172	Oil mud primary/ secondary emulsifier						X	X	
CorsiTech	PRODUCT 6178	Temporary clay stabilizer	X	X	X	X	X			
CorsiTech	PRODUCT 63	Corrosion inhibitor						X	X	
CorsiTech	PRODUCT 7012	Concentrated Defoamer	X	X	X	X	X			
CorsiTech	PRODUCT 71	Oxygen scavenger	X	X	X	X	X			
CorsiTech	SPECIAL PLUG	Fluid loss additive	X	X	X	X	X			
CorsiTech	SPECIAL SEAL	Fluid loss additive	X	X	X	X	X			
CorsiTech	X-Corr LT	Green low temperature acid inhibitor	X	X	X	X	X			
CorsiTech	X-Corr HT	Green high temperature acid inhibitor	X	X	X	X	X			
CorsiTech	Torg Free EF	Environmental friendly lubricant	X	X	X	X	X			
CorsiTech	Torg Free HD	Drilling mud lubricant	X	X	X	X	X			
CorsiTech	X-Mul AP	high performance non-emulsifier						X	X	
CorsiTech	X-Mul HD	high performance non-emulsifier						X	X	
CorsiTech	Klay Safe CC	environmental friendly clay stabilizer	X	X	X	X	X			
CorsiTech	Product 1203	high performance non-emulsifier	X	X	X	X	X			
CorsiTech	Product 6191	high performance flowback aid	X	X	X	X	X			
CorsiTech	Flo Free SW	Friction Reducer	X	X	X	X	X			
CorsiTech	Product 8086	Scale Inhibitor	X	X	X	X	X			
Deep South	BIO 3	High molecular filming amine	X	X	X					
Deep South	BLUE MAX	Surfactant surface cleaner	X	X		X	X			
Deep South	BP 101	Wellbore displacement solvent						X	X	
Deep South	BP 24	Silicone D	X	X	X					
Deep South	BP 4620	Mixture of non-ionic surfactants and solvents	X	X	X	X	X	X	X	
Deep South	BP 9125	Mixture of non-ionic surfactants	X	X	X	X	X	X	X	
Deep South	BP 9140	Mixture of non-ionic surfactants	X	X	X	X	X	X	X	
Deep South	BP 9755	Mixture of non-ionic surfactants	X	X	X	X	X	X	X	
Deep South	BP 9846	Mixture of solvents	X	X	X	X	X	X	X	
Deep South	BP PREFLUSH	Sulfonated copolymer	X	X	X	X				
Deep South	BP SPACER MIX	A mixture of dispersant and polymer	X	X	X	X				
Deep South	CEMENT RETARDER	Sodium Lignosulfonate	X	X						
Deep South	CLC 500 L	Cement fluid loss agent	X	X						
Deep South	DSC 300	Heterocyclic filming amine	X	X	X					
Deep South	DSC BF30	Thiocarbonate bactericide						X		
Deep South	DSC CIDE	Organic sulfur antimicrobial agent	X	X	X					
Deep South	DSC H.T. 450	CO to 450°F	X	X	X	X				
Deep South	DSC INSOL	Asphaltic inhibitor and dispersant								
Deep South	DSC OS-50	Sulfite-based oxygen scavenger	X	X	X	X	X			
Deep South	DSC VIS	Non-ionic pure hydroxyethyl cellulose	X	X	X	X	X			
Deep South	GOLD CLEAN	Solvent/surfactant surface cleaner						X	X	
Deep South	GOLD FLUSH	Pipe pickling solvent and cleaner for greases, oils	X	X	X	X	X	X	X	
Deep South	GOLD FLUSH CM	Solvent cake remover, cleaner for Cement Spacer	X	X	X	X	X	X	X	
Deep South	GOLD FLUSH II	Wellbore displacement solvent	X	X	X	X	X	X	X	
Deep South	GOLD FLUSH II UK	OCNS E-rated solvent	X	X	X	X	X	X	X	
Deep South	GOLD FLUSH R	Solvent for riser cleaning						X	X	
Deep South	GOLD FLUSH SA	Solvent for open hole displacements and perf. cleanup	X	X	X	X	X	X	X	
Deep South	GOLD FLUSH SB	Wellbore displacement additive						X	X	
Deep South	GOLD SURF	Water wetting surfactant	X	X	X	X	X	X	X	
Deep South	GOLD SURF 11-W	OCNS E-rated surfactant	X	X	X	X	X	X	X	
Deep South	GOLD SURF C	Non-ionic surfactant for Cement Spacer	X	X	X	X	X	X	X	
Deep South	GOLD SURF II	Wellbore displacement surfactant, cleaner	X	X	X	X	X	X	X	
Deep South	GOLD SURF S	Non-ionic surfactant for open hole displacements	X	X	X	X	X	X	X	
Deep South	GOLD VIS	Gelling agent for all GOLD FLUSH solvents						X	X	



# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Deep South	HEC LINEAR GEL E	OCNS E-rated liquid HEC	X	X	X	X	X		V	FR
Deep South	HYDRO MAG	pH buffer for fresh and brine waters	X	X	X	X	X		A	SU
Deep South	KO 1200	Water-soluble zinc chelate for H2S	X	X	X	X	X		V	FR
Deep South	LIQUID GUAR E	Liquid V using unmodified guar	X	X	X	X	X		V	FR
Deep South	LIQUID XA-E POLYMER	Liquid polymer	X	X	X	X	X		V	FR
Deep South	PINK POWER	Surfactant surface cleaner	X	X	X	X	X	X	SU	
Deep South	SI 120	Prevents deposition of alkaline earth metal scales					X		V	
Deep South	SPACER VIS	Polymer	X	X	X	X	X		SU	
Deep South	SUNCO FIBER S	A blend of three fibers	X	X	X	X	X	X	LO	
Deep South	SUNCO GRAPHITE	A amorphous graphite	X	X	X	X	X	X	LO	
Deep South	SUNCO GRAPHITE COARSE FLAKE	A amorphous graphite	X	X	X	X	X	X	LO	
Deep South	SUNCO LIGNITE	An amine treated lignite	X	X	X	X	X	X	FR	HPHT
Deep South	SUNCO LINGO	A ferro-chrome activated lignosulphonate	X	X	X	X	X	X	TH	FR
Deep South	SUNCO LINGO CF	A chrome free lignosulphonate powder	X	X	X	X	X	X	TH	FR
Deep South	SUNCO LIQUID GRAPHITE	Aqueous dispersion of graphite	X	X	X	X	X	X	LU	
Deep South	SUNCO LUBE	A biodegradable lubricants	X	X	X	X	X	X	LU	
Deep South	SUNCO LUBE 100	A blend of biodegradable lubricants	X	X	X	X	X	X	LU	
Deep South	SUNCO OBM-LCM	A blend of natural fibers						X	X	LO
Deep South	SUNCO ORGANOCALY	Organically modified clays						X	X	V
Deep South	SUNCO PAC	Polyanionic cellulose polymer	X	X	X	X	X	X	V	
Deep South	SUNCO PECAN SHELLS	Selectively sized pecan shells	X	X	X	X	X	X	LO	
Deep South	SUNCO POLYACRYLATE THINNER	Water-soluble copolymer	X	X	X	X	X	X	V	TE
Deep South	SUNCO POMA SEAL	A blend of plant fibers and carbon	X	X	X	X	X	X	LO	
Deep South	SUNCO PRESERVED STARCH	Potato starch	X	X	X	X	X	X	FR	V
Deep South	SUNCO SEAL	A selectively sized carbonaceous material	X	X	X	X	X	X	LU	
Deep South	SUNCO SHIELD	Polyols blend of surfactants	X	X	X	X	X	X	LU	SH
Deep South	SUNCO SI	Liquid gilsonite	X	X	X	X	X	X	HPHT	SH
Deep South	SUNCO SPOT (DRY) SACK FISHING TOOL TYPE	A blend of emulsifiers	X	X	X	X	X	X	P	HPHT
Deep South	SUNCO SPOT (LIQUID)	Oil-based fluid	X	X	X	X	X	X	P	
Deep South	SUNCO SQUEEZE	Diatomaceous earth-based fiber	X	X	X	X	X	X	LO	
Deep South	SUNCO SULPHONATED ASPHALT	Sulphonated asphalt	X	X	X	X	X	X	SH	FR
Deep South	SUNCO SULPHONATED ASPHALT (LIQUID)	Aqueous sulphonated asphalt	X	X	X	X	X	X	SH	FR
Deep South	SUNCO TAN THIN	Chrome-activated tannin	X	X	X	X	X	X	TH	
Deep South	SUNCO TAN THIN CF	Chrome-free tannin	X	X	X	X	X	X	TH	
Deep South	SUNCO UNTREATED GILSONITE	Naturally hydrocarbon resin						X	X	TE
Deep South	SUNCO VARISEAL	A blend of lost circulation additives	X	X	X	X	X	X	LO	
Deep South	SUNCO WALNUT SHELL	Lost circulation additive	X	X	X	X	X	X	FR	V
Deep South	SUNCO WHITE STARCH	A gelatinized corn starch	X	X	X	X	X	X	FR	V
Deep South	SUNCO XANTHAN GUM	A Biopolymer	X	X	X	X	X	X	V	
Deep South	SUNCO XANTHAN GUM (TECH GRADE)	A Biopolymer	X	X	X	X	X	X	V	
Deep South	SUNCO YELLOW STARCH	A gelatinized corn starch	X	X	X	X	X	X	FR	V
Deep South	SUPER HOT STUFF	Surfactant surface cleaner	X	X	X	X	X	X	SU	
Deep South	WD-24	Silicone D	X	X	X	X	X	X	D	
Deep South	WELL WASH I	Surfactant and mixed alcohol, water-based displacement	X	X	X	X	X	X	SU	SH
Deep South	WELL WASH II	Surfactant and solvent for wellbore displacement	X	X	X	X	X	X	SU	
Dow	ANTISOL FL 30,000	High-viscosity polyanionic cellulose	X	X	X	X	X	X	V	FR
Dow	CARBITOL	Glycol ether solvents	X	X	X	X	X	X	WBC	TH
Dow	CARBOWAX PEG-400	Polyethylene glycol	X	X	X	X	X	X	WBC	TH
Dow	CARBOWAX PEG-600	Polyethylene glycol	X	X	X	X	X	X	WBC	TH
Dow	CELLULOSE HEC-10	Hydroxyethyl cellulose	X	X	X	X	X	X	V	RDF
Dow	CELLULOSE HEC-10HV	Hydroxyethyl cellulose	X	X	X	X	X	X	V	RDF
Dow	CELLULOSE HEC-25	Hydroxyethyl cellulose	X	X	X	X	X	X	V	RDF
Dow	CELLULOSE HEC-25HV	Hydroxyethyl cellulose	X	X	X	X	X	X	V	RDF
Dow	CELLOSOLVE	Glycol ether solvents	X	X	X	X	X	X	WBC	TH
Dow	DOWANOL	Glycol ether solvents	X	X	X	X	X	X	WBC	TH
Dow	DOWFAX	Anionic surfactants	X	X	X	X	X	X	SU	FO
Dow	EMBARK Defoamers	alcohol & glycol based defoamers	X	X	X	X	X	X	SU	FO
Dow	EMBARK Rheology Modifiers	acrylic polymers	X	X	X	X	X	X	RDF	
Dow	EMBARK Shale Inhibitors	cloud point glycol	X	X	X	X	X	X	LU	SH
Dow	EMBARK Surfactant	Non-ionic surfactants	X	X	X	X	X	X	SU	E
Dow	TERGITOL	Non-ionic surfactants	X	X	X	X	X	X	SU	E
Dow	TRITON	Anionic surfactants	X	X	X	X	X	X	SU	FO
Dow	TRITON	Non-ionic surfactants	X	X	X	X	X	X	SU	FO
Dow	UCON FLUIDS	Polyglycols	X	X	X	X	X	X	LU	SH
Drill. Spec.	CLARIZAN	Clarified xanthan gum biopolymer	X	X	X	X	X	X	V	FR
Drill. Spec.	DESCO DEFOAM	Liquid defoamer	X	X	X	X	X	X	D	FR
Drill. Spec.	DESCO CF DEFOCCULANT	Organic mud thinner	X	X	X	X	X	X	TH	TE
Drill. Spec.	DESCO CF DEFOCCULANT II	Organic mud thinner	X	X	X	X	X	X	TH	TE
Drill. Spec.	DESCO DEFOCCULANT	Organic mud thinner	X	X	X	X	X	X	TH	TE
Drill. Spec.	DIASEAL M LCM	Blended high-solids squeeze materials	X	X	X	X	X	X	MLCM	LO
Drill. Spec.	DRILL PAC HV	Purified polyanionic cellulose	X	X	X	X	X	X	X	FR
Drill. Spec.	DRILL PAC LV	Purified polyanionic cellulose	X	X	X	X	X	X	X	FR
Drill. Spec.	DRILL-THIN THINNER	Chrome-free tannin mud conditioner	X	X	X	X	X	X	TH	TE

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid  
**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Drill. Spec.	DRILLZAN D BIOPOLYMER	Xanthan gum biopolymer	X	X	X	X	X	X	X	V
Drill. Spec.	DRISCAL D POLYMER	Synthetic polymer for HPHT filtrate control	X	X	X	X	X	X	X	HPHT
Drill. Spec.	DRISCAP LIQUID POLYMER	Liquid polyanionic cellulose	X	X	X	X	X	X	X	FR
Drill. Spec.	DRISCAP PLUS REG POLYMER	Polyanionic cellulose polymer self dispersing	X	X	X	X	X	X	X	FR
Drill. Spec.	DRISCAP PLUS SUPERLO POLYMER	Polyanionic cellulose polymer self dispersing	X	X	X	X	X	X	X	FR
Drill. Spec.	DRISCAP REGULAR	Polyanionic regular viscosity polymer	X	X	X	X	X	X	X	FR
Drill. Spec.	DRISCAP SUPERLO	Polyanionic low viscosity cellulose polymer	X	X	X	X	X	X	X	FR
Drill. Spec.	DRISTEMP POLYMER	Synthetic polymer LV for HPHT control	X	X	X	X	X	X	X	HPHT
Drill. Spec.	DYNARED FIBER COARSE	Seepage loss additive and loss circulation additive	X	X	X	X	X	X	X	LO
Drill. Spec.	DYNARED FIBER FINE	Seepage loss additive and loss circulation additive	X	X	X	X	X	X	X	LO
Drill. Spec.	DYNARED FIBER MEDIUM	Seepage loss additive and loss circulation additive	X	X	X	X	X	X	X	LO
Drill. Spec.	DYNA-SEAL OBM FIBER FINE	Seepage loss/lost circulation additive for oil-based muds	X	X	X	X	X	X	X	LO
Drill. Spec.	DYNA-SEAL OBM FIBER ULTRA FINE	Seepage loss/lost circulation additive for oil-based muds						X	X	LO
Drill. Spec.	DYNA-SEAL OBM FIBER MEDIUM	Seepage loss/lost circulation additive for oil-based muds						X	X	LO
Drill. Spec.	FLOWZAN BIOPOLYMER	Xanthan gum biopolymer	X	X	X	X	X	X	X	V
Drill. Spec.	FLOWZAN LIQUID	Liquid xanthan gum biopolymer	X	X	X	X	X	X	X	V
Drill. Spec.	GREENBASE DRISCAP POLYMER	Liquid polyanionic cellulose	X	X	X	X	X	X	X	FR
Drill. Spec.	GREENBASE FLOWZAN	Liquid xanthan gum biopolymer	X	X	X	X	X	X	X	V
Drill. Spec.	GREENBASE HE 150 POLYMER	Liquid Synthetic polymer for friction reduction	X	X	X	X	X	X	X	LU
Drill. Spec.	GREENBASE HEC	Pure HEC in non-setting Liquid suspension	X	X	X	X	X	X	X	V
Drill. Spec.	HE-100 POLYMER	Synthetic water-soluble copolymer	X	X	X	X	X	X	X	V
Drill. Spec.	HE-150 POLYMER	Synthetic water-soluble copolymer	X	X	X	X	X	X	X	V
Drill. Spec.	HE-300 POLYMER	Synthetic water-soluble copolymer	X	X	X	X	X	X	X	V
Drill. Spec.	HE-400 POLYMER	Synthetic water-soluble copolymer	X	X	X	X	X	X	X	V
Drill. Spec.	HEC LIQUID	Pure HEC in non-setting Liquid suspension	X	X	X	X	X	X	X	V
Drill. Spec.	LIQUID HE-150 POLYMER	Synthetic water-soluble copolymer	X	X	X	X	X	X	X	LU
Drill. Spec.	SOLTEX ADDITIVE	Sulfonated residuum	X	X	X	X	X	X	X	SH
Drill. Spec.	SOLTEX ADDITIVE POTASSIUM	Sulfonated residuum	X	X	X	X	X	X	X	SH
Drill. Spec.	SURE-SEAL LPM	Loss prevention material for wellbore strengthening	X	X	X	X	X	X	X	LO
Drill. Spec.	TORQUE-SEAL ADDITIVE	Lost circulation material for casing and horizontal drilling	X	X	X	X	X	X	X	LO
Drill. Spec.	WELL-SEAL LCM COARSE	Lost circulation material for oil and gas drilling	X	X	X	X	X	X	X	LO
Drill. Spec.	WELL-SEAL LCM FINE	Lost circulation material for oil and gas drilling	X	X	X	X	X	X	X	LO
Drill. Spec.	WELL-SEAL LCM MEDIUM	Lost circulation material for oil and gas drilling	X	X	X	X	X	X	X	LO
Drill. Spec.	DRILL-SURE OBM ADDITIVE	Filtrate control & torque & drag reducer						X	X	FR
Drill. Spec.	DRILL-WELL D210 OBM FL ADDITIVE	Filtrate control reducer in oil-based muds ± 300 °F						X	X	FR
Drill. Spec.	DRILL-WELL D244 OBM FL ADDITIVE	Filtrate control reducer in oil-based muds ± 375 °F						X	X	FR
Drill. Spec.	DRILL-WELL D294 OBM RM	Rheology Modifier for oil-based muds ± 350 °F						X	X	FR
Drillchem	SHALE-X	Sulfonated asphaltite blend	X	X	X	X	X	X	X	SH
Drillchem	HYDROFORCE	Shale Control Additive	X	X	X	X	X	X	X	SH
Drillchem	SURF-COAT	Surface Active Agent	X	X	X	X	X	X	X	SU
Drillchem	BLOCKADE	High Solids/ High Fluid Loss LCM squeeze, "Squeeze-While-Drilling"	X	X	X	X	X	X	X	MLCM
Drillchem	COMBAT	Sealant and FCS enhancer	X	X	X	X	X	X	X	LO
Drillchem	DRILL-BEADS	Drill pipe and casing lubricant in horizontal wells	X	X	X	X	X	X	X	LU
Drillchem	DRILL-LUBE	EP lubricant	X	X	X	X	X	X	X	LU
Drillchem	F.I.T.	Sealant and FCS enhancer	X	X	X	X	X	X	X	LO
Drillchem	FIRST STRIKE	Sealant and FCS enhancer	X	X	X	X	X	X	X	LO
Drillsafe	DSB-200	Biodegradable biocide	X	X	X	X	X	X	X	B
Drillsafe	DSB-301	Water-soluble, biodegradable biocide	X	X	X	X	X	X	X	B
Drillsafe	MULTI-DF	Fresh and saltwater D	X	X	X	X	X	X	X	D
Drillsafe	MULTIDRILL	Modified starch polymer	X	X	X	X	X	X	X	FR
Drillsafe	MULTILUBE B	Non-toxic, biodegradable LU	X	X	X	X	X	X	X	LU
Drillsafe	MULTIMAG	Modified (magnesium) starch polymer	X	X	X	X	X	X	X	FR
Drillsafe	MULTISAL	Carboxymethylated polymer	X	X	X	X	X	X	X	FR
Drillsafe	MULTISVS S	High MW polysaccharidic polymer	X	X	X	X	X	X	X	V
DSC	BOREASE	Lubricant - non-damaging; non-hydrocarbon	X	X	X	X	X	X	X	LU
DSC	HIBEASE	Inhibitor - replaces KCl /inhibition	X	X	X	X	X	X	X	SH
DSC	SEALLEASE	LCM - proprietary blend of LCM	X	X	X	X	X	X	X	LO
DSC	SHALEASE	Shale stabilizer and inhibitor	X	X	X	X	X	X	X	SH
DSC	THINEASE	Blended deflocculant/dispersant	X	X	X	X	X	X	X	TH
DSC	TORKEASE	Lubricant - non-damaging; temp. stable (>600°F)	X	X	X	X	X	X	X	LU
DSC	VISCASE	Viscosifier/flocculant - hole sweep	X	X	X	X	X	X	X	V
Ecofluids	CLAYDRILL	Non-ionic flocculant	X	X	X	X	X	X	X	SH
Ecofluids	CLAYKILL	Low molecular weight shale inhibitor	X	X	X	X	X	X	X	SH
Ecofluids	DRILLFAST	Penetration enhancer	X	X	X	X	X	X	X	SU
Ecofluids	ECOCFL-II	Dispersant chrome free lignosulfonate	X	X	X	X	X	X	X	TH
Ecofluids	ECO-D	Drilling detergent	X	X	X	X	X	X	X	SU
Ecofluids	ECO-DEFOAM-X	Defoamer	X	X	X	X	X	X	X	D

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material  
**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers  
**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based Synthetic-based Air, mist, foam, gas	Primary	Secondary
Ecofluids	ECODRILL	High temp. filtrate reducer	X	X	X	X	X		FR	
Ecofluids	ECOFEG II	Gilsonite filtrate reducer	X	X	X	X	X		FR	
Ecofluids	ECOFCL	Amine lignite filtrate reducer					X		FR	
Ecofluids	ECOFIBER	Cellulose fiber (<100 mesh)	X	X	X	X	X	X	LO	
Ecofluids	ECOFLO	Xantham gum	X	X	X	X	X	X	V	
Ecofluids	ECOFUID	Well wash	X	X	X	X	X	X	SU	CF
Ecofluids	ECOFOAM G	Foaming agent						X	FO	
Ecofluids	ECOFREE	Spotting fluid	X	X	X	X	X		P	A
Ecofluids	ECOLGYCOL-H	HMW lubricant/shale inhibitor	X	X	X	X	X		SH	LU
Ecofluids	ECOLGYCOL-L	LMW lubricant/shale inhibitor	X	X	X	X	X		SH	LU
Ecofluids	ECOLGYCOL-P	Lubricant/shale inhibitor	X	X	X	X	X		SH	LU
Ecofluids	ECOLIG	Lignite			X	X	X		FR	TH
Ecofluids	ECOMOD	Viscosifier						X	V	
Ecofluids	ECOMUL	Primary emulsifier						X	E	
Ecofluids	ECONEX	Resin-based filtrate reducer	X	X	X	X	X		FR	SH
Ecofluids	ECONITE	Liquid gilsonite	X	X	X	X	X		SH	FR
Ecofluids	ECO-OBGEL	Organophilic clay						X	V	FR
Ecofluids	ECOPAC LV	Polyanionic cellulose	X	X	X		X		FR	SH
Ecofluids	ECOPAC R	Polyanionic cellulose	X	X	X	X	X		FR	V
Ecofluids	ECO-PBGEL	Organophilic clay						X	V	FR
Ecofluids	ECO-PHPA	PHPA	X	X		X	X		SH	V
Ecofluids	ECO-PHPA-L	PHPA liquid	X	X	X	X	X		SH	V
Ecofluids	ECOSTF	Spotting additive	X	X	X	X	X		P	
Ecofluids	ECOSPERS	Oil mud thinner					X	X	TH	
Ecofluids	ECOSTARCH	Pre-gelatinized starch	X	X	X	X	X		V	FR
Ecofluids	ECOSTARCH W	Pre-gelatinized starch	X	X	X	X	X		V	FR
Ecofluids	ECOSTARCH-HT	Pre-gelatinized starch high temp.	X	X	X	X	X		V	FR
Ecofluids	ECOSTARCH-M	Pre-gelatinized starch medium temp.	X	X	X	X	X		V	FR
Ecofluids	ECOSTARCH-P	Pre-gelatinized starch	X	X	X	X	X		V	FR
Ecofluids	ECOSULFONATE HT	High temp. thinner	X	X	X	X	X		TH	TE
Ecofluids	ECOTEX	Sulfonated asphalt	X	X	X	X	X	X	FR	SH
Ecofluids	ECOTHIN-E	High temp. thinner	X	X	X	X	X		TH	TE
Ecofluids	ECO-VIS-HT	HPHT viscosifying polymer	X	X	X	X	X		V	FR
Ecofluids	ECOWET	Secondary emulsifier					X	X	E	
Ecofluids	EF-100N	Glycerol inhibitor	X	X	X	X	X		SH	LU
Ecofluids	GUMBOTROL	Gumbo inhibitor	X	X	X	X	X		SH	
Ecofluids	K-SUB	KCL substitute/inhibitor	X	X	X	X	X		CF	SH
Ecofluids	MUD-SAVE F	Thermoset rubber LCM (10-100 mesh)	X	X	X	X	X	X	LO	
Ecofluids	MUD-SAVE M	Thermoset rubber LCM (6-20 mesh)	X	X	X	X	X	X	LO	
Ecofluids	MUD-SAVE SF	Thermoset rubber seepage loss additive	X	X	X	X	X	X	LO	
Ecofluids	PAC-LV	Filtrate reducer	X	X	X	X	X		FR	SH
Ecofluids	PAC-R	Filtrate reducer	X	X	X	X	X		FR	V
Ecofluids	STRATA DRILL	Amine-based clay inhibitor	X	X	X	X	X		HS	SH
Ecofluids	STRATA HIB	Organic salt-based clay inhibitor	X	X	X	X	X		HS	SH
Ecofluids	STRATABEADS	Glass beads mechanic lubricant	X	X	X	X	X		LU	TE
Ecofluids	STRATALUBE	Glycol-based high performance lubricant	X	X	X	X	X		LU	
Ecofluids	STRATASEAL	Specialty LCM	X	X	X	X	X	X	LO	
Ecofluids	SUPERALL	OB cutting treatment agent						X	SU	BR
Ecofluids	VULCATROL	HPHT filtration control polymer	X	X	X	X	X		FR	V
Ecofluids	VULCATHIN	HTHP Co-Polymer Thinner	X	X	X	X	X		TH	
Elementis	BENTONE 128	Easy-dispersing organo-bentonite						X	X	V
Elementis	BENTONE 150	Rapid, high-yielding organo-bentonite						X	X	V
Elementis	BENTONE 155	High-yielding mud plant organo-bentonite						X	X	V
Elementis	BENTONE 160	Vegetable oil-based fluid						X	X	V
Elementis	BENTONE 34	Organo-bentonite						X	X	V
Elementis	BENTONE 38	Organo-hectorite high temp.						X	X	V
Elementis	BENTONE 42	Organo-hectorite ultra high temp.						X	X	V
Elementis	BENTONE 905	Economy organo-bentonite						X	X	V
Elementis	BENTONE 910	Economy organo-bentonite						X	X	V
Elementis	BENTONE 920	Economy, easy-dispersing organo-bentonite						X	X	V
Elementis	BENTONE 990	Amino-attapulgite suspending agent						X	X	V
Elementis	BENTONE CT	Specialty hectorite	X	X	X	X	X		V	FR
Elementis	THIXATROL DW	Polymeric deep water						X	X	V
Elementis	THIXATROL DW50	Polymeric flat RA for deep water and ECD control						X	X	V
Elementis	THIXATROL DW100	Biodegradable (OECD 306 - 43%) polymeric flat rheology modifier for deep water and ECD control						X	X	V
Elementis	Thixatrol RM14	Polymeric low shear rate rheology modifier for non aqueous drilling fluids - Sag & ECD control						X	X	V
Elkem	ESM D2	Deflocculant/stabiliser especially for HPHT app's	X	X	X	X	X		TH	TE
Elkem	MICRODENSE	Microfine weighting material	X	X	X	X	X	X	W	LU
Elkem	MICROMAX	Ultrafine weighting material	X	X	X	X	X	X	W	
EMEC	BIOPOLY-E	Xanthan biopolymer	X	X	X	X	X	X	V	
EMEC	BIOPOLY-K	Xanthan biopolymer	X	X	X	X	X	X	V	
EMEC	BLACK SHALE	Sized gilsonite, glycol, surfactant blend	X	X	X	X	X	X	SH	FR
EMEC	BRINE VIS	Hydroxyethyl Cellulose	X	X	X	X	X	X	V	
EMEC	EMEC BAR	Barium Sulfate (API specs)	X	X	X	X	X	X	W	FR
EMEC	EMEC Bridge	Resin-based bridging material	X	X	X	X	X		LO	
EMEC	EMEC BUF	pH buffer for solids water-based muds	X		X	X		X	A	FR
EMEC	EMEC BU Latex	Styrene Butadiene Latex	X	X	X	X	X		SH	SH
EMEC	EMEC CARB	Calcium Carbonate; acid soluble	X	X	X	X	X	X	LO	W
EMEC	EMEC CIDE-L	Liquid biocide, preservative	X	X	X	X	X		B	
EMEC	EMEC CIDE-P	Powder biocide, preservative	X	X	X	X	X		B	
EMEC	EMEC CMC-HV	Pure grade high viscosity polymer	X	X	X	X	X	X	FR	V
EMEC	EMEC CMC-LV	Pure grade low-viscosity polymer	X	X	X	X	X	X	FR	SH

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid  
**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
EMEC	EMEC COAT-B	Amine-based corrosion inhibitor	X	X	X	X	X	X		X	CO			
EMEC	EMEC COAT-D	Amine-based corrosion inhibitor	X	X	X	X	X	X		X	CO			
EMEC	EMEC CON	Secondary emulsifier							X		E		FR	
EMEC	EMEC DETERGENT	Sulphurized Tall Oil	X	X	X	X	X	X			LU			
EMEC	EMEC DISPERSANT	Surfactant rig wash dispersant	X	X	X	X	X	X			SU		WBC	
EMEC	EMEC ECOSAFE-E	Ester-based alternative for mineral oil								X	SB			
EMEC	EMEC ECOSAFE-O	Olefin-based alternative for mineral oil								X	SB			
EMEC	EMEC FLC (HT)	Modified anionic polymer	X	X	X	X	X	X			FR			
EMEC	EMEC GEL	OCMA Bentonite	X	X	X	X	X	X			V		FR	TE
EMEC	EMEC LIG	Causticized lignite	X	X	X	X	X	X			TH		FR	TE
EMEC	EMEC LUBE	Lubricant for water-based fluids	X	X	X	X	X	X			LU			
EMEC	EMEC MIL	MMH viscosifier	X			X	X	X			V		SH	SH
EMEC	EMEC MUL	Primary emulsifier							X		E		FR	
EMEC	EMEC MUL NT	Low toxicity primary emulsifier							X		E		FR	TH
EMEC	EMEC NO FOAM	Alcohol-based defoamer	X	X	X	X	X	X			FO			
EMEC	EMEC PAC-R	Polyanionic cellulose; high viscosity	X	X	X	X	X	X		X	FR		V	
EMEC	EMEC PAC-SL	Polyanionic cellulose; low viscosity	X	X	X	X	X	X		X	FR		SH	
EMEC	EMEC RESIN	Hi-Temp synthetic resin	X	X	X	X	X	X			FR		TE	
EMEC	EMEC SEAL	Granular flakes and fibrous material (F.M,C)	X	X	X	X	X	X	X		LO			SH
EMEC	EMEC SOAK O	Solvent and surfactant wash							X		WBC			LU
EMEC	EMEC SOAK W	Soaking agent for removing filter cake	X	X	X	X	X	X			WBC			
EMEC	EMEC SPOT	Alcohol-based pipe freeing agent	X	X	X	X	X	X	X		P			
EMEC	EMEC SURF	Blend of SU for enhanced ROP	X	X	X	X	X	X		X	SU		LU	
EMEC	EMEC TEX	Modified asphalt, gilsonite and lignite	X	X	X	X	X	X			SH		FR	
EMEC	EMEC TEX-A	Sulfonated asphaltite	X	X	X	X	X	X			SH		FR	
EMEC	EMEC THIN	Oil-based mud thinner							X	X	TH		SU	
EMEC	EMEC THIX	Low-end rheological modifier							X	X	V		FR	
EMEC	EMEC TONE	Asphaltic additive for FR							X	X	FR		E	
EMEC	EMEC TONE II	Non-asphaltic additive for FR							X	X	FR		E	
EMEC	EMEC TRUE WATE	Micronized Barite	X	X	X	X	X	X	X		W			LU
EMEC	EMEC VIS	Organophilic clay							X	X	V			
EMEC	EMEC VIS II	Organophilic clay for low-toxicity oil mud							X	X	V			
EMEC	EMEC WATE	Iron Oxide (Hematite)	X	X	X	X	X	X	X		W			
EMEC	EMEC WET	Wetting agent for oil-based fluids							X		SU		TH	
EMEC	EMEC WET NT	Low toxicity wetting agent							X		SU		TH	
EMEC	EMELOY	Pregelatinized starch	X	X	X	X	X	X			FR			
EMEC	EMELOY NF	Non-fermenting starch	X	X	X	X	X	X			FR			
EMEC	FC-10	Chrome-free lignosulfonate	X	X	X	X	X	X			TH		FR	
EMEC	FC-8	Ferro-chrome lignosulfonate	X	X	X	X	X	X			TH		FR	
EMEC	FLR-170	High melting point resin							X	X	FR		LO	
EMEC	FRAC SEAL	Blended fiber, granule, platelet LCM	X	X	X	X	X	X	X		LO			
EMEC	HP LUBE	Extreme-pressure lubricant	X	X	X	X	X	X			LU			
EMEC	HSS-L	Zinc Carbonate H2S scavenger liquid	X	X	X	X	X	X	X		CO			SH
EMEC	HSS-P	Zinc Carbonate H2S scavenger powder	X	X	X	X	X	X	X		CO			
EMEC	HT POLYMER	Modified organic polymer	X	X	X	X	X	X			FR			
EMEC	POTASSIUM LIGNITE	Deflocculant for Potassium-based fluids	X	X	X	X	X	X			TH		FR	
EMEC	MAGIC SEAL	Polymer/bridging particle blend	X	X	X	X	X	X	X		FR		RDF	RDF
EMEC	NO FOAM	Deafoamer for water-based fluids	X	X	X	X	X	X			D			
EMEC	OSL	Liquid bisulfite oxygen scavenger	X	X	X	X	X	X			CO		TE	
EMEC	OSP	Powder sulfite oxygen scavenger	X	X	X	X	X	X			CO		TE	RDF
EMEC	PERM BRIDGE	Sized Calcarb bridging material	X	X	X	X	X	X	X		LO			
EMEC	PERM BUF	Magnesium Oxide buffering agent	X	X	X	X	X	X			A			
EMEC	PERM DEFOAMER	Alcohol-based defoamer	X	X	X	X	X	X			D			
EMEC	PERM DRILL	Thixotropic biopolymer	X	X	X	X	X	X			V		FR	
EMEC	PERM SEAL	Fermentation resistant starch	X	X	X	X	X	X			FR		RDF	
EMEC	PERM VIS	HEC viscosifier	X	X	X	X	X	X			FR		RDF	
EMEC	POLYBEADS	Spherical polymer beads	X	X	X	X	X	X	X		FR			
EMEC	POLYTREX	Fermentation resistant starch	X	X	X	X	X	X			LU			
EMEC	POLYTREX-HT	Hi-Temp non-fermenting starch	X	X	X	X	X	X			FR			
EMEC	SAFE CIDE	Aldehyde-based biocide	X	X	X	X	X	X			B			
EMEC	SAFE COR	Non-toxic corrosion inhibitor	X	X	X	X	X	X			CO			
EMEC	SAFE FLOC	Flocculant for improved productivity	X	X	X	X	X	X	X		FL		WBC	
EMEC	SAFE HOLE CLEAN	Solvent/Surfactant blend	X	X	X	X	X	X	X	X	WBC		SU	
EMEC	SAFE H-SCAV	Liquid H2S scavenger	X	X	X	X	X	X	X		CO			
EMEC	SAFE O-SCAV	Sulfite-based oxygen scavenger	X	X	X	X	X	X			CO			
EMEC	SAFE SPOT	Surfactant-based pipe-freeing agent	X	X	X	X	X	X			P			FR
EMEC	SAFE SPOT (W)	Surfactant-based pipe-freeing agent	X	X	X	X	X	X			P		FR	
EMEC	SAFE SURF	Surfactant/Solvent blend for WBC	X	X	X	X	X	X	X		WBC		SU	
EMEC	SALTILAY	Attapulgite clay viscosifier	X	X	X	X	X	X			V		FR	
EMEC	SHALE DRILL-L	PHPA liquid shale stabilizer	X	X	X	X	X	X			SH		V	
EMEC	SHALE DRILL-P	PHPA powder shale stabilizer	X	X	X	X	X	X			SH		V	
EMEC	STRATA HEAL	Cellulose fiber LCM	X	X	X	X	X	X	X		LO			
EMEC	TONE 400	Asphaltic resin for filtration control							X	X	FR			
EMEC	TRUE OIL EMULSIFIER	Emulsifier							X	X	E		FR	
EMEC	WATER GEL	Wyoming Bentonite	X	X	X	X	X	X			V		FR	
Emery	DEHYLUB 1037	Ester based lubricant - WBM	X	X	X	X	X	X			LU			
Emery	DEHYLUB 1316	Ester based lubricant - Silicate fluids	X	X	X	X	X	X			LU			
Emery	DEHYLUB 1324	Ester based lubricant WBM and OBM	X	X	X	X	X	X	X		LU			
Emery	DEHYLUB 1757	WBM Lubricant	X	X	X	X					LU			
Emery	OMC 1000	Ester carrier fluid								X	SB			
Emery	OMC 233	Ester carrier fluid								X	SB			
Emery	OMC 586 XL	Ester carrier fluid								X	SB			
Emery	TERRADRIL EM 1120	HT Emulsifier, environmentally friendly							X	X	E		SU	
Emery	TERRADRIL EM 1485	Oil mud emulsifier							X	X	E		SU	
Emery	TERRADRIL S 1118	Casing cleaner, environmentally friendly									SU		WBC	
Emery	TERRADRIL S 1310	Casing cleaner, concentrated surfactant blend									SU		WBC	

A	= Alkalinity (pH control)	CO	= Corrosion inhibitors	HPHT	= High pressure
AC	= Anionic control	D	= Defoamers	HPWB	= High pressure water break
B	= Bactericides	E	= Emulsifiers	HS	= Hydrate solids
BR	= Breakers	FR	= Filtrate reducers	LO	= Lost circulation
CA	= Calcium removers	FL	= Flocculants	LU	= Lubricant
CF	= Completion fluid	FO	= Foaming agents	MLCM	= Massive loss of cement material

high temperature	P	= Pipe-freeing agents	TE	= Temperature stability agents
ence, water-based	RDF	= Drill-in fluid	TH	= Thinners, dispersants
essant	SB	= Synthetic-based	V	= Viscosifiers
n additives	SH	= Shale-control agents	W	= Weighting materials
	SU	= Surface-active agents	WBC	= Wellbore cleanout
irculation material	T	= Tracers	WBM	= Water-based mud



# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Impact	STAR THERMOSET MEDIUM	Seepage Control and Lost Circulation Treatment	X	X	X	X	X	X	X	X	LO
Impact	STAR THERMOSET FINE	Seepage Control and Lost Circulation Treatment	X	X	X	X	X	X	X	X	LO
Impact	STAR SEAL 4000	Sand or Gravel Sealant	X	X	X	X	X	X	X	X	MLCM
Impact	LCP 2000	Lost Circulation Treatment	X	X	X	X	X	X	X	X	MLCM
Integrity	BRINESHIELD	Brine additive to protect human tissue							X	X	
Integrity	EZE-VIS-LT	Liquid V				X	X				V
Integrity	EZ-VIS-OLS	Envr. liquid V				X	X				V
Integrity	MAGNA-LUBE	Vertical reach LU/enhancer	X	X	X	X	X	X			LU
Integrity	MINERAL-LUBE	ROP enhancer	X	X	X	X	X	X			LU
Integrity	PETRO-SORB	Oil absorbent							X	X	
Integrity	RUST-X	Rust converter and primer									CO
Integrity	SAFE-SPOT	Spotting fluid	X	X	X	X	X	X	X	X	P
Integrity	SAFEVERT FL-G	Oil mud gilsonite							X		FR
Integrity	SAFEVERT I	Primary E							X		E
Integrity	SAFEVERT II	Secondary E							X		E
Integrity	SAFEVERT SUPERWET	Oil mud wetting agent							X		SU
Integrity	SAFEVERT TWA	Oil mud TH							X		TH
Integrity	SAFEVERT VISCOSIFIER	Organoclay							X		V
Integrity	SULFA-TONE	Sulfonated asphalt		X	X	X	X	X	X		SH
Integrity	SYNVERT FL-G	Synthetic FR							X		FR
Integrity	SYNVERT I	Synthetic primary E							X		E
Integrity	SYNVERT II	Synthetic secondary E							X		E
Integrity	SYNVERT TWA	Synthetic TH							X		TH
Integrity	SYNVERT VISCOSIFIER	Synthetic V							X		V
Integrity	THERMABREAK	Internal breakers							X	X	
Integrity	THERMACOAT	Metal treatment for bits, stabilizers	X	X	X	X	X	X			LU
Integrity	THERMASOLVE	Promotes destruction of filter cake, emulsions and water wets solids	X	X	X	X	X	X	X	X	LU
Integrity	ULTRA LUBE	ROP enhancer	X	X	X	X	X	X			LU
Integrity	ULTRA LUBE II	Offshore extended-reach LU	X	X	X	X	X	X			LU
Integrity	X-VIS-LT	Xanthan gum suspension, passes LC-50 and static sheen tests	X	X	X	X	X	X			V
Integrity	X-VIS-OLS	Xanthan gum suspension, passes LC-50 and static sheen oil and grease tests									V
ISP	NUOSEPT 78 AND 7850	Hexahydro hydroxyethyl-s-triazine	X	X	X	X	X	X			B
ISP	NUOSEPT 91	Hexahydro hydroxyethyl-s-triazine	X	X	X	X	X	X			B
ISP	PVP K-90	Poly vinyl pyrrolidone	X	X	X	X	X	X			SH
ISP	SBR 1006	Emulsion styrene butadiene rubber							X	X	FR
ISP	SBR 1011	Emulsion styrene butadiene rubber							X	X	FR
ISP	SBR 1012 HIGH VISCOSITY	Emulsion styrene butadiene rubber							X	X	FR
ISP	SBR 1013	Emulsion styrene butadiene rubber							X	X	FR
ISP	SETLEZE 3000	Vinyl pyrrolidone di-methyl amino propyl methacrylamide	X	X	X	X	X	X			SH
ISP	SURFADONE LP 100	N-octyl-2-pyrrolidone (NOP)	X	X	X	X	X	X	X	X	SU
ISP	TECHWAX AQUA 1140	Acrylic homopolymer			X	X					TH
ISP	TECHWAX AQUA 510	Acrylic copolymer			X	X					TH
ISP	TECHWAX AQUA 512	Acrylic copolymer			X	X					TH
ISP	TECHWAX AQUA 8022RD	Partially hydrolyzed polyacrylamide inhibitor	X	X	X	X	X	X			SH
ISP	TECHWAX EM 125	Polyamides							X	X	E
ISP	TECHWAX EM 348	Cross-linked fatty amides							X	X	E
ISP	TECHWAX EM 40	Polyamides and modified fatty acids							X	X	E
ISP	TECHWAX EM 466	Polyamides and esters							X	X	E
ISP	TECHWAX EM 492	Polyamides, esters and modified fatty acids							X	X	E
ISP	TECHWAX EM 503	Polyamides and modified fatty acids							X	X	E
ISP	TECHWAX FLA 12	Cryogenically ground and finely ground ESBR							X	X	FR
ISP	TECHWAX GSL	Lignite-based with SBR							X	X	FR
ISP	TECHWAX LUB 92	Modified natural oil							X	X	LU
ISP	TECHWAX TH3	Fatty oligomer and imidazoline-based							X	X	TH
ISP	TECHWAX AQUA 7312RD	Partially hydrolyzed polyacrylamide inhibitor powder	X	X	X	X	X	X			SH
ISP	TECHWAX EM 343	Oxidized natural oils, fatty acids, modified amidamine							X	X	E
Kelco	BEN-EX	Bentonite extender and selective flocculant	X			X	X				FL
Kelco	BIOZAN	Welan gum	X	X	X	X	X		X		V
Kelco	CELPOL ESL	Polyanionic cellulose, extremely low-viscosity Gr.	X	X	X	X	X	X	X		FR
Kelco	CELPOL R	Polyanionic cellulose, regular viscosity Gr.	X	X	X	X	X	X	X		FR
Kelco	CELPOL RX	Premium Gr., polyanionic cellulose, high viscosity	X	X	X	X	X	X	X		V
Kelco	CELPOL SL	Purified PAC low viscosity	X	X	X	X	X	X	X		FR
Kelco	CELPOL SLX	Premium purified PAC, low viscosity	X	X	X	X	X	X	X		FR
Kelco	FINNIFX BOL	Middle viscosity tech CMC	X	X	X	X	X	X	X		FR
Kelco	FINNIFX H	Purified, CMC high viscosity Gr.	X	X	X	X	X	X	X		V
Kelco	FINNIFX HC	high-viscosity tech CMC	X	X	X	X	X	X	X		V
Kelco	FINNIFX L	Purified, CMC low viscosity Gr.	X	X	X	X	X	X	X		FR
Kelco	FINNIFX LC	Low-viscosity tech CMC	X	X	X	X	X	X	X		FR
Kelco	FINNIFX RC	Middle viscosity tech CMC	X	X	X	X	X	X	X		FR
Kelco	GEOVIS XT	Diutan gum	X	X	X	X			X		V
Kelco	KELZAN L	Drilling grade xanthan gum	X	X	X	X	X	X	X		V
Kelco	KELZAN XC POLYMER	Xanthan gum	X	X	X	X	X	X	X		V
Kelco	KELZAN XCD POLYMER	Dispersible xanthan gum	X	X	X	X	X	X	X		V
Kelco	KWIKSEAL	LO material	X	X	X	X	X	X	X	X	LO
Kelco	MF-1	Non-ionic polyacrylamide	X	X	X	X	X	X			SH
Kelco	MF-55	Non-ionic polyacrylamide emulsion	X	X	X	X	X	X			SH
Kelco	WL-100	Sodium polyacrylate	X	X	X	X	X	X			FR
Kelco	XANVIS	Completion grade xanthan gum	X	X	X	X	X	X	X		V

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**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**PDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanup  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
Kelco	XANVIS L	Completion grade liquid xanthan gum	X	X	X	X	X	X		X	V			CO
Kelco	XANVIS L (X)	Completion grade xanthan slurry	X	X	X	X	X	X		X	V			CO
Kelco	X-PEL-G	Water-dispersible gilsonite	X	X	X	X	X	X				SH	LU	CO
Kemira	AMA-324	Dazomet Chemistry	X	X	X	X	X					B	CF	CO
Kemira	AMA-3725	25% gluteraldehyde	X	X	X	X	X					B	CF	
Kemira	AMA-3750	50% gluteraldehyde	X	X	X	X						B	CF	
Kemira	Fennosan GL24	24% gluteraldehyde	X	X	X	X						B	CF	
Kemira	Fennosan GL10	50% gluteraldehyde	X	X	X	X						B	CF	
Kemira	AMA-315	Isothiazolin biocide (1.5%)	X	X	X	X						B	CF	
Kemira	Fennosan IT 21	Isothiazolin biocide (2.1%)	X	X	X	X						B	CF	
Kemira	KemFoamX 1951	Dual action water-based defoamer	X	X			X	X				D		
Kemira	KemFoamX 8508	Highly Effective Silicone Emulsion Defoamer	X	X			X	X				D		
Kemira	KemFoamX 1701	Water-based fatty alcohol defoamer	X	X			X	X				D		
Kemira	KemFoamX 5885	Oil-based, non-silicone defoamer	X	X			X	X				D		
Kemira	KemFoamX 8855	Water-based silicone defoamer	X	X			X	X				D		
Kemira	KemDrill 8111	Polycarboxylate thinner		X	X	X	X	X				TH		
Kemira	KemDrill 8111 LD	Polycarboxylate thinner, dry product		X	X	X	X	X				TH		
Kemira	KemDrill 8155	Liquid Polycarboxylate formulation, TH for fresh water		X	X	X	X					TH		
Kemira	KemDrill 8500	Liquid Polycarboxylate formulation, TH for salt water		X	X	X	X	X				TH		
Kemira	KemDrill 8237	Liquid low MW polyacrylate	X	X	X	X	X					TH		
Kemira	KemDrill A-1355	Viscosifier, encapsulator	X	X			X	X				SH	V	FL
Kemira	KemDrill A-1363	Encapsulator	X	X			X	X	X			V	SH	FR
Kemira	KemDrill A-2252	Encapsulator, Shale stabilizer	X	X										
Kemira	KemDrill A-2352	Encapsulator, Shale stabilizer	X	X			X	X	X			V	SH	FR
Kemira	KemDrill A-2353	Viscosifier, encapsulator	X	X			X	X		X	SH	V		FL
Kemira	KemDrill A-2702	Fluid Loss Additive	X	X										
Kemira	KemDrill A-2703	Fluid Loss Additive	X	X			X	X	X			FR	SH	TE
Kemira	KemDrill N-1141	Viscosifier	X	X			X	X	X	X		V	FL	
Kemira	KemDrill N-2141	Viscosifier	X	X			X	X	X	X		V	FL	
Kemira	KemDrill N-2144	Viscosifier	X	X			X	X	X	X		V	FL	
Kemira	KemSep N-8141	Nonionic DPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-6109	Cationic DPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-8206	Cationic DPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-8402	Cationic DPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-7107	Cationic EPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-7205	Cationic EPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep C-7405	Cationic EPAM for Mud Dewatering	X	X								FL		
Kemira	KemSep A-8000 series	Anionic DPAM for Mud Dewatering	X	X								FL		
Kemira	KemVert 2073	Imidazoline-based primary emulsifier							X			E		
Kemira	KemVert 1764	Amide-based secondary emulsifier							X			E		
Kemira	KemVert 5064	Oxidized tall oil amide blend primary emulsifier							X			E		
Kemira	KemVert 4042	Amide-based emulsifier system							X			E		
Kemira	KemVert 5082	Amide-based secondary emulsifier							X			E		
Kemira	KemVert 1086	Lubricant for pipe release							X			P		
Kemira	KemVert 1087	Lubricant for pipe release							X			P		
Kemira	KemDrill 1874	Rheology Modifier							X			TH		
Krishna	CRISTOL HC LUBE	Cloud point glycols/shale inhibitors/Lubricant.	X									SH	LU	
Krishna	CRISTOL CPG	Cloud point glycols/shale inhibitors/Lubricant.	X									SH	LU	
Krishna	CRISTOL LC LUBE	Cloud point glycols/shale inhibitors/Lubricant.	X									SH	LU	
Krishna	CRISTOL SHALESTAB SERIES	Polyamine based Shale Stabilizers	X									SH	V	
Krishna	CRISTOL HTL	Deflocculants	X									TE		TE
Krishna	CRISTOL RTL	Deflocculants	X									TE		TE
Krishna	CRISTOL EP LUBE- I	Extreme Pressure Lubricants	X									LU	P	
Krishna	CRISTOL EP LUBE II	Extreme Pressure Lubricants	X									LU	P	
Krishna	CRISTOL EP LUBE HP	Extreme Pressure Lubricants	X									LU	P	
Krishna	CRISTOL AF 250, AF 150, DFO -3	Defoamers	X									D		W
Krishna	CRISTOL DRILLDET	Drilling Detergents	X									SU		LU
Krishna	CRISTOL SUPER CRISTOL	Drilling Detergents	X									SU		LU
Krishna	CRISTOL DRILLDET ULTRA	Drilling Detergents	X									SU		LU
Krishna	CRISTOL SHS	H2S Scavengers	X									CO		CO
Krishna	CRISTOL FOAMER 25	Foaming Agent	X									FO		W
Krishna	CRISTOL WBF	Foaming Agent	X									FO		W
Krishna	CRISTOL PMR	Primary Emulsifiers							X			E		E
Krishna	CRISTOL PE 70R	Primary Emulsifiers							X			E		E
Krishna	CRISTOL SER	Secondary Emulsifiers							X			E		SU
Krishna	CRISTOL SE 70 R	Secondary Emulsifiers							X			E		SU
Krishna	CRISTOL EMUL ULTRA	Emulsifier							X			E		SU
Krishna	CRISTOL - SL WET	Wetting Agents							X			SU		E
Krishna	CRISTOL DRILLFAST	ROP Enhancer	X									SH		LU
Krishna	CRISTOL FLP 53	HTHP Fluid Loss Reducing Additive	X									LO		FR
Krishna	CRISTOL PFA	Pipe Freeing Agents	X									P		SU
Lamberti	ALBISOL AT	Effective cleaner/spacer	X	X	X	X	X	X	X	X	X	WBC	CF	CF
Lamberti	ALBISOL DM	Effective washer/spacer	X	X	X	X	X	X	X	X	X	WBC	CF	CF
Lamberti	ALBISOL E	Environmental washer/spacer	X	X	X	X	X	X	X	X	X	WBC	CF	SU
Lamberti	ALBISOL F10	Environmental friendly washer/spacer	X	X	X	X	X	X	X	X	X	WBC	CF	SU
Lamberti	ALBISOL K100	Cleaner/Spacer for grease residues	X	X	X	X	X	X	X	X	X	WBC	CF	SU
Lamberti	ALBISOL MCS	Effective washer/spacer	X	X	X	X	X	X	X	X	X	WBC	CF	SU
Lamberti	ALBISOL OE	Solvent-based pipe cleaner							X			WBC	CF	CF
Lamberti	ANTISCALE AC/1	Phosphonate-based scale inhibitor	X			X	X	X			X	CA		
Lamberti	ANTISCALE AC/137	Mixed scale inhibitor	X			X	X	X				CA		
Lamberti	ANTISCALE AC/58	Polymer-based scale inhibitor	X			X	X	X				CA		
Lamberti	BIOLAM XG	Xanthan derivative polymeric viscosifier	X	X	X	X	X	X	X			V		FR
Lamberti	BIOLAM XG LS	Liquid xanthan viscosifier	X	X	X	X	X	X				X	V	
Lamberti	BIOLAM XT	Biopolymer derivative viscosifier	X	X	X	X	X	X				X	V	FR

A	= Alkalinity (pH control)	CO	= Corrosion inhibitors
AC	= Anionic control	D	= Defoamers
B	= Bactericides	E	= Emulsifiers
BR	= Breakers	FR	= Filtrate reducers
CA	= Calcium removers	FL	= Flocculants
CF	= Completion fluid	FO	= Foaming agents

HPHT = High pressure/high temperature	P = Pipe-freeing agents
HPWB = High performance, water-based	RDF = Drill-in fluid
HS = Hydrate suppressant	SB = Synthetic-based
LO = Lost circulation additives	SH = Shale-control agents
LU = Lubricants	SU = Surface-active agents
MLCM = Massive lost circulation material	T = Tracers

TE = Temperature stability agents  
TH = Thinners, dispersants  
V = Viscosifiers  
W = Weighting materials  
WBC = Wellbore cleanout  
WBM = Water-based mud

# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Primary
L-USA	PRESANTIL USP	Free P agent for unweighted spotting fluids	X	X	X	X	X	X		P
L-USA	PRESANTIL WSP	Free P agent for weighted spotting fluids	X	X	X	X	X	X		LU
L-USA	RHEOMATE	Zirconium complex de-gelling agent and HT dispersant			X	X	X			TH
M&D	DRILL XPRESS	Liquid viscosifier for water-based fluids	X	X	X	X	X			V
M&D	LIQUID BRIDGE PLUG	Resin-based lost circulation pill	X	X	X	X	X	X	X	LO
M&D	POLY PLUG CLEAR GEL	Solids free crosslinking polymer	X	X	X	X	X	X		MCLM
M&D	POLY PLUG ULTRA-SQUEEZE	De-watering crosslinking polymer	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-C	Sized cellulosic fibers for lost circulation	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-PLUS	Fibrous, granular and flake material for massive lost circ.	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-POLY PLUG	Single-sack blend of sized fibers and cross-linking polymer	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-TG	Tech grade cellulosic fibers	X	X	X	X	X	X	X	LO
M&D	ULTRA SEAL-XLA	Crosslink polymer, temp. accelerator	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-XLD	Crosslink polymer, mixing enhancer	X	X	X	X	X	X	X	D
M&D	ULTRA SEAL-XLR	Crosslink polymer, temp. retarder	X	X	X	X	X	X		MCLM
M&D	ULTRA SEAL-XP	Specific blend of micronized cellulose fibers	X	X	X	X	X	X	X	LO
M&D	ULTRA SPACER	Non-invasive mud spacer	X	X	X	X	X	X		LO
MASI	ACTIGUARD	Shale and clay inhibitor	X	X	X	X	X	X		SH
MASI	ACTIPAC	One sack fluid	X	X	X	X	X			HPWB
MASI	ACTIVATOR I	Thermal stabilizer for the AphronICS fluid			X	X				TE
MASI	ACTIVATOR II	pH and alkalinity additive	X		X	X	X			A
MASI	ACTIVIS LSR	Rheological enhancer	X		X	X	X			HPWB
MASI	APHRONICS FLUID	At-balance polymer viscosified drilling and completion fluid	X		X	X	X		X	HPWB
MASI	APHRONIZER A	Aphron shell enhancer	X		X	X	X			SU
MASI	APHRONIZER B	Aphron shell enhancer	X		X	X	X			SU
MASI	BIO-CIDE	Microbicide	X	X	X	X	X			X
MASI	BLUE STREAK	Mud conditioner and air micro-encapsulator for the AphronICS fluid	X		X	X				SU
MASI	GO-DEVIL II	Provides LSRV for AphronICS fluid			X	X				V
MASI	HY TONE	HPHT additive for water-based fluids	X	X	X	X	X			HPHT
MASI	HYSTER FLUID	At-balance clay viscosified drilling and completion fluid	X	X	X	X	X		X	HPWB
MASI	MICRO SEAL	Micronized fiber	X	X	X	X	X			LO
MASI	MICRODYNE L	Aphron generator and stabilizer						X	X	SU
MASI	MICRO-LUBE	Pollution-free LU-liquid	X	X	X	X	X			LU
MASI	NATURE-FLOC	Natural polymer flocculant	X		X	X	X			FL
MASI	PAK N' PLUG	Blend of organic fibers	X	X	X	X	X			LO
MASI	PASSIVATOR I	Defoamer	X	X	X	X				D
MASI	PLASTICIZER	Aphron shell stabilizer	X		X	X	X			SU
MASI	POLY-MUL	Invert emulsifier						X	X	SU
MASI	POLYPHRONICS FLUID	At-balance water in oil-based drilling and completion fluid						X	X	X
MASI	POLY-Q	LSRV booster/PolypHronICS enhancer						X	X	V
MASI	POLY-VIS	Primary rheological modifier for PolyphroniC-Soil-based fluid						X	X	V
MASI	POLY-WET	Oil wetting agent						X	X	SU
MASI	POSSISQUEEZE	High solids, high fluid loss LCM squeeze	X	X	X	X	X	X		LO
MASI	PROTODRILL	One sack drilling fluid	X		X	X				V
MASI	SWEEP N' SEAL	Cellulose fiber/oil mud seepage loss						X	X	LO
MASI	TRICON HT	High temp. stabilizer for biopolymer fluids	X	X	X	X	X			TE
MASI	TRI-VIS CP+	Rheological modifier for PolyphroniC oil-based fluid						X	X	V
Mayco	MAYCO-CARBATE	Calcium carbonate			X	X	X	X		W
Mayco	MAYCO-CALW	Non-thixotropic polymeric blend, graded and sized carbonates	X		X	X	X	X		V
Mayco	MAYCO-CORCIDE	CO, oxygen scavenger, biocide	X	X	X	X	X			B
Mayco	MAYCO-DEFOAM	All-purpose D	X	X	X	X	X			D
Mayco	MAYCO-FLC	Blend of selected non-ionic polymers for fluid loss control	X	X	X	X	X			FR
Mayco	MAYCO-FLOW	Blend of selected polymers, lignosulfonates and sized calcium carbonates	X	X	X	X	X			FR
Mayco	MAYCO-HELP	Polymeric temp. extender	X	X	X	X	X			TE
Mayco	MAYCO-KLAYTROL	Blend of rigid non-ionic polymer, chloride free, potassium and ammonium salts	X	X	X	X	X			SH
Mayco	MAYCO-LVIS	Liquid HEC polymer	X	X	X	X	X			V
Mayco	MAYCO-MAD SEAL	Acid-degradable blend of granules, flakes and fibrous material	X	X	X	X	X	X		LO
Mayco	MAYCO-MAPP	Blend of non-ionic drilling polymers	X	X	X	X	X			V
Mayco	MAYCO-pH BUFFER	Magnesium oxide	X	X	X	X	X			A
Mayco	MAYCO-SEAL	Graded and sized calcium carbonates	X	X	X	X	X	X		LO
Mayco	MAYCO-SEAL COARSE	Graded and sized calcium carbonates	X	X	X	X	X	X		LO
Mayco	MAYCO-SEAL MEDIUM	Graded and sized calcium carbonates	X	X	X	X	X	X		LO
Mayco	MAYCO-SLURRY	Polymers, lignosulfonates and graded/sized calcium carbonates	X	X	X	X	X	X		LO
Mayco	MAYCO-TREAT	Surfactants for emulsion and water block prevention	X	X	X	X	X	X		SU
Mayco	MAYCO-VIS	Thixotropic polymers and sized calcium carbonates	X	X	X	X	X			V
Mayco	MAYCO-VIS EXTRA	Free-flowing HEC	X	X	X	X	X			V
Messina	BIOVIS	Standard drilling grade biopolymer			X	X	X			V
Messina	BIOVIS-D	Dispersible biopolymer			X	X	X			V
Messina	BIOVIS-P	Premium xanthan biopolymer			X	X	X			V
Messina	BORE-SWEEP	Hole sweep/cleaning agent	X	X	X	X	X	X	X	V
Messina	BORE-TROL	Shale inhibitor and mud conditioner	X	X	X	X	X			SH
Messina	CETROL-LV	Organic polymer	X	X	X	X	X			FR
Messina	CETROL-SP1	Tech-grade CMC	X	X	X	X	X			FL
Messina	CIDE-COR	Corrosion inhibitor and biocide	X	X						CO

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MCLM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**PDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Primary
Messina	CIDE-COR-II	Corrosion inhibitor, oxygen scavenger and biocide	X	X		X	X			CO
Messina	CIDE-COR-PLUS	Corrosion inhibitor, oxygen scavenger and biocide	X	X		X				CO
Messina	CLA-STAB	Shale control/clay stabilizer	X	X		X	X			SH
Messina	CLA-STAB-II	Concentrate shale control and lubricant	X	X		X	X			SH
Messina	CLA-STAB-III	Clay stabilizer/KCl substitute	X	X		X	X			SH
Messina	DIAPLUG	High-filtration lost circulation squeeze	X	X	X	X	X			LO
Messina	DRILL-PEN	ROP enhancer/bit-balling surfactant	X	X	X	X	X			LU
Messina	FERRO-SPONGE	H2S remover	X	X	X	X	X	X	X	CO
Messina	FILTRACEL	Tech-grade CMC	X	X	X	X	X			FR
Messina	FILTROL	Modified polysaccharide	X	X	X	X	X			FR
Messina	FILTROL-LV	Carboxymethylated polymer	X	X	X	X	X			FR
Messina	FILTROL-PLUS	Premium modified hydrocolloid	X	X	X	X	X			FR
Messina	FOAM-FREE-A	Alcohol-based Liquiduid defoamer	X	X	X	X	X			D
Messina	FOAM-FREE-ALS	Powdered defoamer	X	X	X	X	X			D
Messina	FOAM-FREE-PG	Glycol-based defoamer	X	X	X	X	X			D
Messina	FOAM-FREE-TB	Phosphate-based anti-foam/defoamer	X	X	X	X	X			D
Messina	FOAM-FREE-V	Vegetable oil-based Liquiduid defoamer	X	X	X	X	X			D
Messina	FOAM-FREE-WF 9	Silicone-based Liquiduid antifoul agent	X	X	X	X	X			D
Messina	GB-SEAL	Blended cementitious gunk squeeze	X	X	X	X	X			CO
Messina	H2LESS	Liquiduid H2S extractor	X	X	X	X	X			CO
Messina	HI-THIN	New generation organic thinner	X							TH
Messina	HI-THIN-II	New generation organic thinner	X							TH
Messina	HI-THIN-III	New generation organic thinner	X							TH
Messina	HI-WATE	Galena	X				X	X		W
Messina	HOLE-SEAL-II	Fibrous LCM	X	X	X	X	X			LO
Messina	HOLE-SEAL-OB	Fibrous LCM					X	X		LO
Messina	HOTGEL	Sepiolite	X	X	X	X	X			V
Messina	HYDRO-WET	Surfactant wetting agent/dispersant	X	X	X	X	X			SU
Messina	KLEEN-BAR	Barium carbonate	X	X	X	X	X			CO
Messina	KLEEN-BLOCK	Sized carbonates	X	X	X	X	X	X		LO
Messina	KLEEN-BLOCK-X	Maximum-sized carbonates	X		X	X	X			LO
Messina	KLEEN-BRIDGE	Oil-soluble resin	X	X	X	X	X			FL
Messina	KLEEN-CON	Environmentally friendly invert emulsifier, E						X	X	E
Messina	KLEEN-CON (HT)	Environmentally friendly invert emulsifier, E, HPHT						X	X	E
Messina	KLEEN-DRIL	Polymer blend	X		X	X	X			V
Messina	KLEEN-DRIL-II	One-bag drlg polymer blend	X		X	X	X			V
Messina	KLEEN-DRIL-X	High performance 1-bag drill-in fluid system	X		X	X	X			RDF
Messina	KLEEN-LUBE	Drilling lubricant	X	X	X	X	X			V
Messina	KLEEN-MUL-L	Environmentally friendly invert emulsifier, E						X	X	E
Messina	KLEEN-MUL-L (HT)	Environmentally friendly invert emulsifier, E, HPHT						X	X	E
Messina	KLEEN-OIL	Low-toxicity, and synthetic-based oils						X	X	X
Messina	KLEEN-PIL	Polymer blend						X		LO
Messina	KLEEN-PPG	Glycol-based shale control	X	X		X	X	X		SH
Messina	KLEEN-SAL	Sized salt for drill-in fluids	X		X	X	X			RDF
Messina	KLEEN-SEAL	Polymer/carbonate blend			X	X	X			LO
Messina	K-STAB	Environmentally friendly potassium source, KCl substitute	X	X	X	X	X	X		SH
Messina	KLEEN-SWEEP	Brine clarifier						X		FL
Messina	KLEEN-THIN	Surfactant; for low-toxicity and synthetic invert muds						X	X	TH
Messina	KLEEN-TROL	Fluid loss additive for drill-in fluid	X		X	X	X			FR
Messina	KLEEN-VIS	Polymer/carbonate blend	X		X	X	X			V
Messina	KLEEN-VIS-2	Low residue polysaccharide			X	X	X			V
Messina	KLEEN-VIS-X	Non-damaging polymer	X		X	X	X			V
Messina	KLEEN-VIS-XL	Liquiduid non damaging polymer	X		X	X	X			V
Messina	KLEEN-WATE	Heavy clear brines								W
Messina	KLEEN-WET	Wetting agent; low-toxicity and synthetic invert muds						X	X	SU
Messina	KLEEN-ZAN	Viscosifier for drill-in fluids	X		X	X	X			V
Messina	MARITE	Hematite	X	X	X	X	X	X		W
Messina	MEGA-LINK	LCM crosslinker	X	X	X	X	X			LO
Messina	MEGA-SEAL	Polymer LCM	X	X	X	X	X			LO
Messina	MESUCO-BAR	Barite	X	X	X	X	X	X		W
Messina	MESUCO-BEN	OCMA bentonite	X	X	X	X	X			V
Messina	MESUCO-BEN-M	Special drilling clay	X	X	X	X	X			V
Messina	MESUCO-CL	Causticized lignite	X	X	X	X	X			TH
Messina	MESUCO-CRCL	Chrome causticized lignite	X	X	X	X	X			TH
Messina	MESUCO-FIBER	Fibrous LCM	X	X	X	X	X			LO
Messina	MESUCO-FLAKE	Cellophane flakes	X	X	X	X	X			LO
Messina	MESUCO-FOAM	Foaming agent						X		FO
Messina	MESUCO-GEL	API bentonite	X	X	X	X	X			V
Messina	MESUCO-KL	Potassium humate	X	X	X	X	X			TH
Messina	MESUCO-LIG	Lignite	X	X	X	X	X			TH
Messina	MESUCO-MICA	Mica LCM	X	X	X	X	X			LO
Messina	MESUCO-PLUG	Ground nut shells	X	X	X	X	X			LO
Messina	MESUCO-SALT-CLAY	Attapulgite	X	X	X	X	X			V
Messina	MESUCO-SEAL	Blended LCM	X	X	X	X	X			LO
Messina	MESUCO-SORB	Powdered H2S remover	X	X	X	X	X			CO
Messina	MESUCO-SUPER-GEL	Extended bentonite	X							V
Messina	MICRO-SEAL	Liquiduid shale stabilizer, mud cond.	X	X	X	X	X			SH
Messina	MICRO-SEAL-II	HT filtration control/borehole stabilizer	X	X	X	X	X			SH
Messina	MUDDT	Non-ionic detergent blend	X	X	X	X	X			SU
Messina	MUD-MUL	Blended surfactant	X	X	X	X	X			SU
Messina	MUDUP	Natural guar polymer	X							V



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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Messina	MUDUP-PLUS	Modified polysaccharide	X		X	X	X	X	V	FR
Messina	OILAD-CI	CO series, corrosion inhibitors	X	X	X	X	X	X	CO	B
Messina	OILCON	Invert emulsifier			X	X	X	X	E	FR
Messina	OILMUL-L	Invert emulsifier						X	X	E
Messina	OILSEAL	Sized resinous particles						X	LO	E
Messina	OILSPOT-FIT	Weighted spotting fluid	X	X	X	X	X	X	P	TE
Messina	OILSPOT-L	Weighted spotting fluid	X	X	X	X	X	X	P	
Messina	OILSPOT-P	Weighted spotting fluid	X	X	X	X	X	X	P	
Messina	OILTHIN	Oil mud TH						X	X	TH
Messina	OILTONE-1	Asphaltic blend						X	X	FR
Messina	OILTONE-2, 3, 4	Non-asphaltic fluid loss additives						X	X	FR
Messina	OILVIS	Organophilic clay						X	X	V
Messina	OILVIS-2	Organophilic clay for low-toxicity and synthetic systems						X	X	V
Messina	OILVIS-PLUS	Low end rheology modifier						X	X	V
Messina	OILWET	Wetting agent, dispersant						X	X	SU
Messina	PERMATROL-LV	Tech-grade CMC	X	X	X	X	X	X	FL	SH
Messina	POLY-BEN	Bentonite extender	X		X	X			V	FL
Messina	POLY-FLOC	Flocculant			X	X			FL	SH
Messina	POLY-PLUG	Reversible cross-linked polymer plug system	X	X	X	X	X	X	MLMC	LO
Messina	POLY-SEAL	Formation/water control agent	X		X				LO	FR
Messina	POLY-SEAL-HT	High temp. LCM and water/formation control agent	X		X				LO	FR
Messina	POLY-SEAL-RESIN	Resin sealant	X		X				LO	
Messina	POLY-SLICK	Copolymer beads	X	X	X	X	X	X	LU	SH
Messina	POLYSPERSE	Polymeric deflocculant/TH	X	X	X	X			TH	TE
Messina	POLYSPERSE-XHT	High performance polymeric deflocculant	X	X	X	X			TH	TE
Messina	POLYTHERM-FL	High temp. liquid filtration polymer, HPHT, HPWB	X	X	X	X			FL	TE
Messina	POLYTHERM-FX	High temp. filtration polymer, HPHT, HPWB	X	X	X	X	X		TE	FL
Messina	POLYTHERM-FX2	High temp. filtration control polymer, HPHT, HPWB	X	X	X	X	X		TE	FL
Messina	POLYTHERM-FX3	High temp. filtration control polymer, HPHT, HPWB	X	X	X	X	X		TE	FL
Messina	POLYTHERM-FX3L	High temp. filtration control polymer (Liquid), HPHT, HPWB	X	X	X	X	X		TE	FL
Messina	POLYTHERM-FX5	High temp. filtration control polymer, HPHT, HPWB	X	X	X	X	X		TE	FL
Messina	POLYTROL	Liq. polymer, non-damaging V	X		X	X	X		V	FR
Messina	POLYTROL-1000	Liq. PHPA			X	X	X		SH	V
Messina	POLYTROL-L	Liq. polymer non-damaging V	X		X	X	X		V	FR
Messina	PUREGEL	Premium untreated API bentonite	X	X	X	X	X		V	FR
Messina	REDI-COAT	Encapsulating polymer	X		X	X			SH	V
Messina	REDI-COAT-PLUS	Encapsulating polymer	X		X	X			SH	V
Messina	REDI-COAT-XL	Encapsulating polymer, low viscosity	X		X	X			SH	V
Messina	REDI-DRILL	Full-function drilling polymer	X		X	X	X		V	FL
Messina	REDI-FLO-NHV	Selected cellulosic ether polymer	X	X	X	X	X		X	V
Messina	REDI-FLO-NLV	Selected cellulosic ether polymer	X	X	X	X	X		X	V
Messina	REDI-PH	Buffered A agent	X		X	X	X		A	FR
Messina	REDI-THIN	Polymeric thinner	X	X	X	X	X		TH	TE
Messina	REDI-X10	Polymer thermal stabilizer	X		X	X	X		TE	
Messina	RHEOTHIN	Modified lignosulfonate	X	X					TH	E
Messina	RHEOTHIN-CF	Chrome-free lignosulfonate	X	X					TH	E
Messina	RHEOTHIN-CF-III	Modified, chrome-free lignosulfonate	X	X					TH	E
Messina	RHEOTHIN-HT	Polymer-modified lignin	X						TH	FL
Messina	SLICKPIPE	Lubricity agent	X	X	X	X	X		TH	LU
Messina	SLICKPIPE-EP-II	Environmentally-safe extreme pressure lubricant	X	X	X	X	X		LU	
Messina	SLICKPIPE-NT	Environmentally-safe lubricant	X	X	X	X	X		LU	
Messina	SOLUBLE-WATE	Calcium carbonate	X	X	X	X	X	X	W	
Messina	SORB-OX-L	Liquid oxygen scavenger	X	X	X	X	X		CO	
Messina	SORB-OX-P	Powdered oxygen scavenger	X	X	X	X	X		CO	
Messina	STARFIX	Stabilized polysaccharide	X	X	X	X	X		FR	
Messina	STARFIX-PLUS	Premium preserved hydrocolloid	X	X	X	X	X		FL	V
Messina	STUCKBREAKER	Spotting fluid surfactant	X	X	X	X	X		P	
Messina	STUCKBREAKER-ES	Environmentally safe spotting	X	X	X	X	X		P	
Messina	STUCKBREAKER-W	Spotting surfactant	X	X	X	X	X		P	SH
Messina	SUPER-BORE-TROL	Potassium shale stabilizer	X	X	X				SH	FR
Messina	SUPER-STOP	Complex dry powder formulation	X	X	X	X			MLCM	V
Messina	SUPER-STOP-AS	Acid-soluble LCM	X	X	X	X	X		MLCM	
Messina	SURF-ACT	Nonionic mud surfactant	X		X				SU	TE
Messina	THERMO-SEAL	Asphaltic shale stabilizer	X	X	X	X	X	X	SH	LU
Messina	THERMO-TROL-50	High temp. filtration control polymer, HPHT, HPWB	X	X	X	X			TE	FL
Messina	THERMO-TROL-FL	High temp. filtration polymer, HPHT, HPWB	X	X	X	X			TE	TH
Messina	THERMO-TROL-X	High temp. stabilizer, cond., HPHT, HPWB	X	X					TE	TH
Messina	TRU-OIL	Oil mud basic package					X		V	E
Messina	ULTRACEL	High-purity CMC	X	X	X	X	X		FR	V
Messina	VISFLO	Polyanionic cellulosic polymer	X	X	X	X	X		FR	V
Messina	VISVAC	Tech grade polyanionic cellulosic polymer	X	X	X	X	X	X	FR	V
Messina	WELCIDE-52	Liquid bactericide concentrate	X	X	X	X	X	X	X	B
Messina	WELCIDE-52ZE	Liquid bactericide	X	X	X	X	X	X	X	B
Messina	WELCIDE-75	Liquid biocide, CO, O2 scavenger	X						X	
Messina	WELCIDE-HT	Thiocarbamate-type B	X	X	X	X	X	X	X	B
Messina	WELCIDE-L	Liquid bactericide	X	X	X	X	X	X	X	B
M-I SWACO	ACTI-BUILD	Polar activator for Eastern Hemisphere						X	X	
M-I SWACO	ACTIMUL RD	Powder emulsifier						X	X	
M-I SWACO	ALPINE SPOTTING BEADS	Lubricating beads	X	X	X	X	X	X	X	LU

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**CA** = Calcium removers  
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**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**DF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
M-I SWACO	ANTI-FOAM XLRT	Defoamer	X	X	X	X	X	X	X	D
M-I SWACO	ASPHASOL	Sulfonated organic resin blend			X	X	X	X	SH	FR
M-I SWACO	ASPHASOL D	Sulfonated organic blend			X	X	X	X	SH	FR
M-I SWACO	ASPHASOL SUPREME	Sulfonated asphalt	X	X	X	X	X	X	SH	FR
M-I SWACO	BAR-NONE	Barium sulfate scale dissolver							BR	
M-I SWACO	BLOK-R 750	Wellbore strengthening additive	X	X	X	X	X	X	FR	
M-I SWACO	BUBBLE BUSTER	Low toxicity defoamer	X	X	X	X	X	X		D
M-I SWACO	CALOSPERSER	Unique blend of polymeric and organic chrome-free thinners specially formulated for improved rheology control of water-based drilling fluids	X	X		X	X			TH
M-I SWACO	CALOSPERSER 2r	Thinner for high temp. water-based drilling fluids	X	X		X	X			TH
M-I SWACO	CALOTHIN	Liquid anionic acrylic copolymer designed to provide rheological stability in HTHP water-based drilling fluids	X	X		X	X			TH
M-I SWACO	CALOVIS FL	Specially formulated product designed for use as a fluid-loss reducing and rheology stabilizing agent in water-based drilling fluids	X	X		X	X			FR
M-I SWACO	CALOVIS HT	Specially formulated fluid-loss control agent and viscosifier in HTHP water-based drilling fluids	X	X		X	X			FR
M-I SWACO	CAUSTILIG	Causticized lignite		X	X	X	X	X		TH
M-I SWACO	CLEAN UP	Surfactant cleaner	X	X	X	X	X	X	X	SU
M-I SWACO	CLEANPERF OB	Oil-based perforating system				X	X	X	X	CF
M-I SWACO	CLEANPERF WB	Water-based perforating system				X	X	X		CF
M-I SWACO	CONCOR 101	Water-dispersible blended amine		X						CO
M-I SWACO	CONCOR 202B	Persistent filming amine	X	X	X	X	X	X	X	CO
M-I SWACO	CONCOR 303A	Brine-soluble filming amine					X			CO
M-I SWACO	CONCOR 404	Corrosion inhibitor	X	X		X	X	X	X	CO
M-I SWACO	CONCOR 404EH	Corrosion inhibitor	X	X		X	X	X	X	CO
M-I SWACO	CONCOR 404WH	Corrosion inhibitor	X	X		X	X	X	X	CO
M-I SWACO	C-SEAL	Medium-sized, carbon-blend plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO	C-SEAL F	Fine-sized, carbon-blend plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO	D-D	Drilling detergent	X	X	X	X	X	X	X	SU
M-I SWACO	DEEPCLEAN	Displacement chemical					X	X	X	SU
M-I SWACO	DEEPCLEAN NS	Displacement chemical					X	X	X	SU
M-I SWACO	DEFOAM AL	All purpose defoamer	X	X	X	X	X	X	D	
M-I SWACO	DEFOAM NS	All purpose defoamer	X	X	X	X	X	X	D	
M-I SWACO	DEFOAM PLUS NS	All purpose defoamer	X	X	X	X	X	X	D	
M-I SWACO	DEFOAM-A	All-purpose defoamer	X	X	X	X	X	X	X	D
M-I SWACO	DEFOAM-X	All-purpose defoamer	X	X	X	X	X	X	X	D
M-I SWACO	DI-BALANCE	Complexer for the DIPRO system					X			V
M-I SWACO	DI-LOK	Viscosity enhancer and stabilizer for DIPRO LD				X	X			V
M-I SWACO	DI-PLEX	Viscosity enhancer and stabilizer for DIPRO LD				X	X			V
M-I SWACO	DI-TROL	Filtration control agent for the DIPRO system					X			FR
M-I SWACO	DOWFROST MI	Glycol-based packer fluid								CF
M-I SWACO	DRILFREE	High-performance LU, antisticking agent	X	X	X	X	X	X	LU	SU
M-I SWACO	DRIL-KLEEN	Anti-bit balling agent	X	X		X	X	X	SU	E
M-I SWACO	DRIL-KLEEN II	Anti-bit balling agent	X	X		X	X	X	SU	E
M-I SWACO	DRIL-PLEX	MMO viscosifier	X			X	X		V	SH
M-I SWACO	DRILPLEX HT	MMO viscosifier for high temp. applications	X			X	X		V	SH
M-I SWACO	DRILPLEX LT	MMO viscosifier for low temp. applications	X			X	X		V	SH
M-I SWACO	DRILZONE	ROP enhancer designed for use in GOM	X	X	X	X			SU	
M-I SWACO	DRILZONE II	ROP enhancer	X	X	X	X			SU	
M-I SWACO	DRILZONE L	ROP enhancer designed for use on land	X	X	X	X			SU	
M-I SWACO	DRILZONE NS	ROP enhancer designed for use in the North Sea	X	X	X	X			SU	
M-I SWACO	D-SOLVER	Brine-soluble chelating agent for BREAK-DOWN and FAZEBREAK systems				X	X			BR
M-I SWACO	D-SOLVER 7	Neutral to slightly basic chelant				X	X			BR
M-I SWACO	D-SOLVER D	Dry chelant breaker for polymer filtercakes				X	X			BR
M-I SWACO	D-SOLVER EXTRA	Low-pH chelating agent for BREAKDOWN systems				X	X	X		BR
M-I SWACO	D-SOLVER HD	High density chelant for FloPro NT, DIPRO and FazePro filtercake removal				X	X			BR
M-I SWACO	D-SOLVER PLUS	Low-pH chelating agent for BREAKDOWN systems				X	X	X	X	BR
M-I SWACO	D-SPERSE	Mixed surfactant solution used in BREAK-DOWN and FAZEBREAK systems				X	X	X	X	SU
M-I SWACO	D-STROYER	Coated internal oxidizer breaker for water-based RDF filter cakes				X	X	X		BR
M-I SWACO	D-STRUCTUR	Organic acid precursor used in AWAY or OUT breaker systems					X	X		BR
M-I SWACO	D-STRUCTUR	Organic acid precursor used in FAZE-AWAY or FAZE-OUT breaker systems					X	X		BR
M-I SWACO	DUAL-FLO	Fluid-loss additive	X	X	X	X	X	X		FR
M-I SWACO	DUAL-FLO HT	Fluid-loss additive for high-temp. applications	X	X	X	X	X	X		FR
M-I SWACO	DUO-TEC	Xanthan gum	X	X	X	X	X	X		V
M-I SWACO	DUO-TEC NS	Xanthan gum, non-dispersible, clarified for North Sea use	X	X	X	X	X	X	X	V
M-I SWACO	DUO-VIS	Xanthan gum	X	X	X	X	X	X	X	V
M-I SWACO	DUO-VIS L	Liquidified xanthan gum, non-clarified	X	X	X	X	X	X	X	V
M-I SWACO	DUO-VIS NS	Xanthan gum, non-dispersible, non-clarified for North Sea use	X	X	X	X	X	X	X	V
M-I SWACO	DUO-VIS PLUS	Xanthan gum, dispersible, non-clarified	X	X	X	X	X	X	X	V
M-I SWACO	DUO-VIS PLUS NS	Xanthan gum, non-dispersible, non-clarified for North Sea use	X	X	X	X	X	X	X	V
M-I SWACO	DURALON	Filtration control high temp. polymer	X	X	X	X	X	X		FR

# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Water-based fluids					Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
M-I SWACO DUROGEL		Sepiolite clay, meets API specs	X	X	X	X	X		V	TE
M-I SWACO ECOKLEEN		Anticrete for tar applications							U	
M-I SWACO ECOTROL L		Liquid filtration control additive for paraffins, mineral and synthetic oils						X	FR	
M-I SWACO ECOTROL 717D		Filtration control resin for diesel						X	FR	
M-I SWACO ECOTROL HT		Filtration control resin for HTHP applications						X	X	FR
M-I SWACO ECOTROL RD		Liquid filtration control additive for paraffins, mineral and synthetic oils						X	X	FR
M-I SWACO EMUL HT		HPHT E						X	X	E
M-I SWACO ENVIROBLEND		Salt for ENVIROVERT system						X	X	SH
M-I SWACO FAZE-MUL		Emulsifier for FAZEPRO system						X	X	E
M-I SWACO FAZE-MUL CW		Emulsifier for FAZEPRO system in cold climates						X	X	E
M-I SWACO FAZE-WET		Wetting agent for FAZEPRO system						X	X	SU
M-I SWACO FAZE-WET CW		Wetting agent for FAZEPRO system in cold climates						X	X	SU
M-I SWACO FER-OX		Hematite, meets API specs	X	X	X	X	X	X	X	W
M-I SWACO FILTER FLOC		Chemical filtration aid			X	X	X	X		FL
M-I SWACO FLO-PLEX		Fluid-loss additive for DRILPLEX system			X			X		FR
M-I SWACO FLO-PLEX PLUS		Fluid-loss additive for DRILPLEX system			X			X		FR
M-I SWACO FLO-TROL		Starch derivative	X	X	X	X	X	X		FR
M-I SWACO FLO-VIS L		Liquid dispersible, clarified xanthan gum	X	X	X	X	X	X		V
M-I SWACO FLO-VIS NT		Non-dispersible, non-clarified xanthan gum	X	X	X	X	X	X		V
M-I SWACO FLO-VIS PLUS		Premium-Gr., dispersible, clarified xanthan gum	X	X	X	X	X	X	X	V
M-I SWACO FLO-WATE		Sized salt material						X		W
M-I SWACO FLOW-BAK		Surface Tension Reducer			X	X	X			CF
M-I SWACO FLOXT		Clay flocculant	X		X	X				FL
M-I SWACO FORM-A-BLOK		High strength pill for water and oil-based applications	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-BLOK AS		Acid Soluble high strength pill for water and oil-based applications	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-PLUG ACC		Accelerator for FORM-A-PLUG II system	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-PLUG II		Acid-soluble lost circulation plug	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-PLUG RET		Retarder for FORM-A-PLUG II system	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET		Polymeric lost circulation material	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET ACC		Accelerator for FORM-A-SET system	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET AK		Polymeric lost circulation material	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET AKX		Polymeric lost circulation material containing calcium carbonate	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET RET		Retarder for FORM-A-SET system	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SET XL		Crosslinker for FORM-A-SET system	X	X	X	X	X	X	X	LO
M-I SWACO FORM-A-SQUEEZE		High Fluid loss pill	X	X	X	X	X	X	X	LO
M-I SWACO GELEX		Bentonite extender and selective FL	X		X	X				V
M-I SWACO GELPLEX		V for the DRILPLEX system			X					V
M-I SWACO GLYDRIL 100		Polyglycol blend	X	X	X	X	X	X		SH
M-I SWACO GLYDRIL DG		Water-miscible glycol	X	X	X	X	X	X		TE
M-I SWACO GLYDRIL GP		Polyalkylene glycol	X	X	X	X	X	X		SH
M-I SWACO GLYDRIL HC		Polyalkylene glycol	X	X	X	X	X	X		SH
M-I SWACO GLYDRIL LC		Polyglycol shale inhibitor	X	X	X	X	X	X		SH
M-I SWACO GLYDRIL MC		Glycerol/glyceride blend	X	X	X	X	X	X		SH
M-I SWACO G-SEAL		Graphite plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO G-SEAL FINE		Fine-grind graphite plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO G-SEAL HRG		High resiliency graphite	X	X	X	X	X	X	X	LO
M-I SWACO G-SEAL HRG FINE		High resiliency graphite	X	X	X	X	X	X	X	LO
M-I SWACO G-SEAL PLUS		Coarse-sized plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO G-SEAL PLUS COARSE		Blend for lost circulation and wellbore strengthening	X	X	X	X	X	X	X	LO
M-I SWACO HIB-933		Shale inhibitor	X	X	X	X	X	X		SH
M-I SWACO HIBTROL		Fluid loss additive and secondary shale inhibitor	X	X	X	X				FR
M-I SWACO HIBTROL HV		Fluid loss additive and secondary shale inhibitor	X	X	X	X				FR
M-I SWACO HIBTROL ULV		Fluid loss additive and secondary shale inhibitor, ultra-low viscosity	X	X	X	X				FR
M-I SWACO HRP		Liquid V and gelling agent for oil muds						X		
M-I SWACO HYDRABLOK		Deepwater hydrate inhibitor	X	X	X	X	X	X		HS
M-I SWACO IDCAP D		Polymeric shale encapsulator	X	X	X	X	X			SH
M-I SWACO IDLUBE XL		Extreme pressure LU	X	X	X	X	X			TH
M-I SWACO IDSPERSE XT		High temp. polymeric dispersant	X	X	X	X				TH
M-I SWACO INHIBYCOL XT		Wide molecular-weight glocol	X	X	X	X	X			SH
M-I SWACO IRONITE SPONGE		H2S scavenger	X	X	X	X	X			CO
M-I SWACO ISO-ACT		Viscosifier for ISOTHERM insulating packer fluid system						X		V
M-I SWACO ISO-LOK		Crosslinker for ISOTHERM insulating packer fluid system						X		V
M-I SWACO K-17		Potassium lignite		X	X	X	X			TH
M-I SWACO K-52		Potassium supplement	X	X	X	X	X	X		FR
M-I SWACO KLA-CAP		Acrylamide copolymer shale encapsulator	X	X	X	X	X			SH
M-I SWACO KLA-CURE		Hydration suppressant	X	X	X	X	X			SH
M-I SWACO KLA-CURE II		Hydration suppressant	X	X	X	X	X	X		SH
M-I SWACO KLAFLC I		Low-cost shale inhibitor for flocc water drilling	X							FL
M-I SWACO KLAFLC II		Cationic FL for flocc water drilling	X							FL
M-I SWACO KLA-GARD		Shale stabilizer		X	X	X		X	SH	
M-I SWACO KLA-GARD B		Salt-free KLA-GARD		X	X	X		X	SH	
M-I SWACO KLA-HIB		Liquid amine shale inhibitor		X	X	X			SH	
M-I SWACO KLA-HIB NS		Liquid amine shale inhibitor variant for North Sea		X	X	X			SH	
M-I SWACO KLA-PLEX		Potassium-based shale inhibitor	X		X	X			SH	

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**SB** = Synthetic-based  
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**WBM** = Water-based mud

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			Water-based fluids					Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
M-I SWACO KLA-SENTRY		Shale inhibitor for lignosulfonate muds on land		X					SH	
M-I SWACO KLA-STOP		Liquid polyamine shale inhibitor			X	X	X		SH	
M-I SWACO KLA-STOP NS		Liquid polyamine shale inhibitor variant for North Sea			X	X	X		SH	
M-I SWACO KLEEN UP		Surfactant cleaner						X	X	SU
M-I SWACO LIXAN		Liquid xanthan								LO
M-I SWACO LO-FLOSS		Fluid loss additive for Eastern Hemisphere								
M-I SWACO LOTORG		Lubricant for FLOPRO NT and FLOPRO SF systems	X	X	X	X	X	X		SH
M-I SWACO LO-WATE		Acid-soluble, powdered calcium carbonate	X	X	X	X	X	X	X	FR
M-I SWACO LUBE XLS		Extreme-pressure LU	X	X	X	X	X	X		LU
M-I SWACO LUBE-10170B		Oil-base mud lubricant						X		SU
M-I SWACO LUBE-100		Low-toxicity LU	X	X	X	X	X	X		LU
M-I SWACO LUBE-167		Low-toxicity LU	X	X	X	X	X			SH
M-I SWACO LUBE-776		Lubricant for LSND systems	X					X		LU
M-I SWACO LUBE-945		Water-base mud lubricant	X	X	X	X	X	X		LU
M-I SWACO LUBE-1722		All purpose lubricant	X	X	X	X	X	X		LU
M-I SWACO LUBE-PLEX		Lubricant for enhanced-performance DRILL-PLEX system		X						LU
M-I SWACO MEGAMUL		Single drum emulsifier/wetting agent for the MEGADRILL system						X		E
M-I SWACO MEGATROL		Fluid loss control additive in Diesel invert emulsions						X		FR
M-I SWACO MICROBAR		Micronized barite pneumatically transferable						X	X	W
M-I SWACO M-I 157		Supplemental E						X	X	E
M-I SWACO M-I 198		Coarse-ground high-temp. asphaltene						X		LO
M-I SWACO M-I BAR		Barite, API spec	X	X	X	X	X	X	X	W
M-I SWACO M-I BAR Fine Grind		Barite, API spec	X	X	X	X	X	X	X	W
M-I SWACO M-I CEDAR FIBER		Shredded cedar fiber	X	X	X	X	X	X		LO
M-I SWACO M-I CIDE		Non-U.S. biocide	X	X	X	X	X			B
M-I SWACO M-I GEL		Bentonite, meets API spec	X	X	X	X	X	X	X	V
M-I SWACO M-I GEL SUPREME		Non-treated bentonite, meets API-spec	X	X	X	X	X	X	X	V
M-I SWACO M-I GEL SUPREME WYOMING		Non-treated bentonite sourced only from Wyoming, meets API-spec	X	X	X	X	X	X	X	V
M-I SWACO M-I GEL WYOMING		Wyoming-sourced bentonite meets API specs	X	X	X	X	X	X		V
M-I SWACO M-I LUBE		General-purpose LU	X	X	X	X	X	X		LU
M-I SWACO M-I PAC R		Pure PAC polymer, tech GR	X	X	X	X		X	FR	V
M-I SWACO M-I PAC SR		Semi-pure grade quality PAC	X	X	X	X	X			FR
M-I SWACO M-I PAC SUL		Semi-pure grade quality PAC	X	X	X	X	X			FR
M-I SWACO M-I PAC UL		Pure PAC polymer, low viscosity	X	X	X	X	X		X	FR
M-I SWACO M-I SEAL		All purpose LO blend esp. suited for fractured or irregular formations	X	X	X	X	X	X	X	LO
M-I SWACO M-I WATE		4.1 SG barite	X	X	X	X	X	X	X	W
M-I SWACO M-I-X II		Ground cellulose LCM and plugging agent	X	X	X	X	X	X	X	LO
M-I SWACO MUL HTP		Primary E for negative alkalinity system						X	X	E
M-I SWACO MUL XT		HT emulsifier						X	X	E
M-I SWACO MY-LO-JEL		Pre-gelatinized starch	X	X	X	X	X			FR
M-I SWACO NOBUG		Biocide								
M-I SWACO NOVAMOD		V, gelling agent for syn. fluid emulsion muds							X	V
M-I SWACO NOVAMUL		Primary E for syn. fluid emulsion muds							X	E
M-I SWACO NOVAPRO P/S		Surfactant							X	E
M-I SWACO NOVATEC B		LAO-based fluid							X	TH
M-I SWACO NOVATEC F		Maleated rosin polymer/glycol ether fluid loss reducer							X	FR
M-I SWACO NOVATEC M		Low-end rheology modifier							X	V
M-I SWACO NOVATEC P		Primary emulsifier							X	E
M-I SWACO NOVATEC S		Secondary emulsifier							X	E
M-I SWACO NOVATHIN		TH for synthetic system							X	TH
M-I SWACO NOVAWET		Wetting agent for syn. fluid emulsion muds							X	SU
M-I SWACO NOVAWET CN		Capped wetting agent							X	SU
M-I SWACO NOVAWET PLUS		Capped wetting agent							X	SU
M-I SWACO NULLFOAM		Defoamer						X		D
M-I SWACO NUT PLUG		Ground nut hulls	X	X	X	X	X	X	X	LO
M-I SWACO OILFAZE		Sacked oil-based concentrate							X	E
M-I SWACO ONE-TROL HT		Primary FR in Non-aqueous drilling fluids							X	FR
M-I SWACO ONE-MUL		High performance E for invert emulsion fluids							X	E
M-I SWACO ONE-MUL NS		Emulsifier for invert emulsion fluids							X	E
M-I SWACO OPTISEAL I		Loss prevention material	X	X	X	X	X	X		LO
M-I SWACO OPTISEAL II		Loss prevention material	X	X	X	X	X	X		LO
M-I SWACO OPTISEAL III		Loss prevention material	X	X	X	X	X	X		LO
M-I SWACO OPTISEAL IV		Carbonate blend for wellbore strengthening	X	X	X	X	X	X		LO
M-I SWACO OPTITRAK 600		MDT tracer	X	X	X	X	X	X		T
M-I SWACO OS-1L		Sulfite-based oxygen scavenger	X	X	X	X	X	X		CO
M-I SWACO PAD-TROL		Special starch	X		X	X	X			FR
M-I SWACO PARADRIL B		Base fluid for the PARADRIL system							X	TH
M-I SWACO PARALAND B		Base fluid linear paraffin for the PARALAND system							X	TH
M-I SWACO PARAMIX A		Salt for the PARALAND system							X	SH
M-I SWACO PARAMIX N		Salt for the PARALAND system							X	SH
M-I SWACO PARAMUL		Primary E for OBM and SBM PARA systems							X	SU
M-I SWACO PARATROL HT		High-temp. asphaltene							X	FL
M-I SWACO PARAWET		Wetting agent for OBM and SBM							X	X
M-I SWACO PEN-X		Wetting agent for breaker systems for OB filter cakes							X	SU
M-I SWACO PERF-N-PEEL		WBM fluid loss/damage control system for perforated completions							X	FR
M-I SWACO PIPE-LAX		Oil-based surfactant for freeing stuck pipe	X	X	X	X	X	X	X	P
M-I SWACO PIPE-LAX ENV		Low-toxicity liquid stuck pipe soaking fluid	X	X	X	X	X	X	X	P

# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymeric	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
M-I SWACO	PIPE-LAX ENW WH	Western Hemisphere version of PIPE-LAX ENW	X	X	X	X	X	X				P	LU	V
M-I SWACO	PIPE-LAX OB	OB spotting fluid							X			P	LU	V
M-I SWACO	PIPE-LAX W EXPORT	Oil-based liquid stuck pipe soaking fluid	X	X	X	X	X	X	X			P		V
M-I SWACO	POLYPAC ELV	Extra-low viscosity PAC	X	X	X	X	X	X				FR	SH	
M-I SWACO	POLYPAC R	Polyanionic cellulose	X	X	X	X	X	X		X		FR	SH	FL
M-I SWACO	POLYPAC SUPREME R	Polyanionic cellulose, premium Gr.	X	X	X	X	X	X		X		FR	SH	FL
M-I SWACO	POLYPAC SUPREME UL	Polyanionic cellulose, premium Gr., ultra-low viscosity	X	X	X	X	X	X		X		FR	SH	FL
M-I SWACO	POLYPAC UL	Polyanionic cellulose, ultra-low viscosity	X	X	X	X	X	X		X		FR	SH	FL
M-I SWACO	POLY-PLUS	Liquid high M.W. PHPA polymer	X		X	X	X	X		X		SH		FR
M-I SWACO	POLY-PLUS DRY	Dry PHPA polymer	X		X	X	X	X		X		SH		FR
M-I SWACO	POLY-PLUS LV	Low-viscosity PHPA polymer	X		X	X	X	X		X		SH		FR
M-I SWACO	POLY-PLUS RD	Readily-dispersible powdered high M.W. PHPA polymer	X		X	X	X	X		X		SH		FR
M-I SWACO	POLY-SAL	Preserved non-fermenting starch	X	X	X	X	X	X				FR	V	
M-I SWACO	POLY-SAL HT	Non-fermenting starch derivative	X	X	X	X	X	X				FR	V	
M-I SWACO	POLY-SAL T	Non-fermenting tapioca starch derivative	X	X	X	X	X	X				FR	V	
M-I SWACO	POROSEAL	Latex modified starch polymer	X	X	X	X	X	X				SH		
M-I SWACO	POROSEAL NS	New formulation for use in REACH areas	X	X	X	X	X	X				SH		
M-I SWACO	POWERVIS	Viscosifier that creates less pump pressure and thermal convection					X					V		LU
M-I SWACO	POWERVIS L	Liquid version of POWERVIS					X					V		
M-I SWACO	PRIMO-MUL	Emulsifier for PRIMO-FAZE SYSTEM					X		X	X		E		
M-I SWACO	PTS-200	Polymetric temp. stabilizer	X	X			X		X			TE		
M-I SWACO	PTS-530	Alkalinity control agent	X	X		X	X	X				A	TE	TH
M-I SWACO	RAPID SLIDE	Oil-base mud lubricant							X			LU		SU
M-I SWACO	RAPID SWEEP	Dissolvable PHPA Stick	X	X		X	X	X				V	SH	TH
M-I SWACO	RE-PLEX	Anionic scavenger for DRILPLEX system		X								AC		TH
M-I SWACO	RESEAL	Highly compressive graphite	X	X	X	X	X	X	X	X		LO		LU
M-I SWACO	RESINEX	Resinated lignite	X	X	X	X	X	X				FR	TE	
M-I SWACO	RESINEX EH	RESINEX version for Eastern Hemisphere	X	X	X	X	X	X				FR	TE	
M-I SWACO	RESINEX II	Resinated lignite, tech Gr.	X	X	X	X	X	X				FR	TE	
M-I SWACO	RHEBUILD	V for RHELIANT system								X		V		
M-I SWACO	RHEIDUCE	TH for RHELIANT system								X		TH		
M-I SWACO	RHEFLAT	Rheological modifier for RHELIANT system for GOM & non-CEPAS areas								X		V		
M-I SWACO	RHEFLAT NS	Rheological modifier for RHELIANT system for use in CEPAS areas								X		V		
M-I SWACO	RHEFLAT PLUS	Rheological modifier, Anti-Sag Additive							X	X		V		
M-I SWACO	RHEFLAT II	Rheological modifier for RHELIANT system							X	V				
M-I SWACO	RHEOCHEK	Deflocculant		X	X	X	X	X				TH		
M-I SWACO	RHEOSPERS	Polymeric high-temp. deflocculant	X	X	X	X	X	X				TH		LO
M-I SWACO	RHETHIK	Rheological modifier for RHELIANT system								X		V		LO
M-I SWACO	SAFE-BREAK 611	Non-emulsifier						X				CF		W
M-I SWACO	SAFE-BREAK CBF	Emulsion preventer for brine						X				SU		LO
M-I SWACO	SAFE-CARB	Sized ground marble	X	X	X	X	X	X	X	X		W	FR	LO
M-I SWACO	SAFE-CARB 10	Ground marble; fine grind, D50 = 10 microns	X	X	X	X	X	X	X	X		W	FR	LO
M-I SWACO	SAFE-CARB 1400	Ground marble; D50 = 1400 microns	X	X	X	X	X	X	X	X		LO	FR	W
M-I SWACO	SAFE-CARB 2	Ground marble; very fine grind, D50 = 2 microns	X	X	X	X	X	X	X	X		W	FR	LO
M-I SWACO	SAFE-CARB 20	Ground marble; fine grind, D50 = 20 microns	X	X	X	X	X	X	X	X		W	FR	LO
M-I SWACO	SAFE-CARB 250	Ground marble; coarse grind, d50 = 250 microns	X	X	X	X	X	X	X	X		W	FR	W
M-I SWACO	SAFE-CARB 2500	Ground marble; D50 = 2500 microns	X	X	X	X	X	X	X	X		LO	FR	W
M-I SWACO	SAFE-CARB 40	Ground marble; medium grind, d50 = 40 microns	X	X	X	X	X	X	X	X		W	FR	
M-I SWACO	SAFE-CARB 500	Ground marble; extra coarse grind, D50 = 500 microns	X	X	X	X	X	X	X	X		W	FR	
M-I SWACO	SAFE-CARB 600	Ground marble; D50 = 600 microns	X	X	X	X	X	X	X	X		LO	FR	
M-I SWACO	SAFE-CARB 750	Ground marble; D50 = 750 microns	X	X	X	X	X	X	X	X		LO	FR	
M-I SWACO	SAFE-CIDE	Non-US biocide	X	X	X	X	X	X				B		
M-I SWACO	SAFE-COR	Brine corrosion inhibitor						X				CO		
M-I SWACO	SAFE-COR C	Brine corrosion inhibitor						X				CO		
M-I SWACO	SAFE-COR EN	Amine-based CO						X				CO		
M-I SWACO	SAFE-COR HT	High temp. brine CO				X	X	X				CO		
M-I SWACO	SAFE-DFOAM	Defoaming agent	X		X	X	X	X				D		
M-I SWACO	SAFE-FLOC I	Flocculant			X	X	X	X				FL		
M-I SWACO	SAFE-FLOC II	Flocculant			X	X	X	X				FL		
M-I SWACO	SAFE-LINK	Filtration control agent for CF systems						X				FR		
M-I SWACO	SAFE-LINK 110	Cross Linked polymer						X				LO		
M-I SWACO	SAFE-LINK 140	Cross Linked polymer						X				LO		
M-I Swaco	SAFE-LINK 150	Cross Linked polymer						X				FR		
M-I SWACO	SAFE-LUBE	Water-soluble brine LU						X				LU		
M-I SWACO	SAFE-LUBE CW	Water-soluble brine Lubricant for cold climates						X				LU		
M-I SWACO	SAFE-SCAV CA	Oxygen scavenger for calcium and zinc brines						X				CO		
M-I SWACO	SAFE-SCAV HS	Soluble H2S scavenger						X				CO		
M-I SWACO	SAFE-SCAV HSW	Soluble H2S scavenger containing methanol						X				CO		
M-I SWACO	SAFE-SCAV NA	Oxygen scavenger for sodium and potassium brines						X				CO		
M-I SWACO	SAFE-SCAVITE II	Calcium scale preventer						X				CO		
M-I SWACO	SAFE-SOLV 148	Displacement solvent						X	X			WBC		
M-I SWACO	SAFE-SOLV E	Displacement solvent						X	X			SU		
M-I SWACO	SAFE-SOLV OM	Dispersible solvent for O/SBM						X	X			SU		
M-I SWACO	SAFE-SURF E	Non-ionic wellbore cleaning agent for OBM and WBM	X	X	X	X	X	X	X			SU		
M-I SWACO	SAFE-SURF NS	Wash chemical							X	X		SU		
M-I SWACO	SAFE-SURF O II	Displacement wash chemical for O/SBM							X	X		SU		

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**PD** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems							Product Function		
			Water-based fluids					Oil-based Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids					
M-I SWACO	SAFE-SURF W	Displacement wash chemical for WBM	X	X	X	X	X			SU		
M-I SWACO	SAFE-SURF WE	Non-ionic surfactant blend			X	X	X			SU		
M-I SWACO	SAFE-SURF WN	Displacement wash chemical for WBM	X	X	X	X	X			SU		
M-I SWACO	SAFE-SURF Y	Displacement surfactant						X	X	WBC		
M-I SWACO	SAFE-T-PICKLE	Non-aromatic, high-flash-point pipe dope solvent	X	X	X	X	X			SU		
M-I SWACO	SAFE-VIS	V for brine						X		V	FR	
M-I SWACO	SAFE-VIS E	Liquid V for brine						X		V	FR	
M-I SWACO	SAFE-VIS HDE	Liquid V for high-density brine						X		V	FR	
M-I SWACO	SAFE-VIS LE	Liquid V in highly purified mineral oil carrier						X		V	FR	TH
M-I SWACO	SAFE-VIS OGS	Designed to meet oil and grease testing in Gulf of Mexico						X		V	FR	
M-I SWACO	SALT GEL	Attapulgite clay	X	X	X	X	X			V	FR	
M-I SWACO	SCREENKLEEN	Prevents accumulation of tar and heavy oil on shaker screens	X	X	X	X	X			SU		
M-I SWACO	SHALE CHEK	Shale and gumbo control additive	X	X	X	X	X			SH	FR	
M-I SWACO	SI-1000	Scale inhibitor	X	X	X	X	X			CO	SH	
M-I SWACO	SILDRIL D	Dry sodium silicate	X		X	X	X			SH		
M-I SWACO	SILDRIL EPL	Extreme-pressure LU for SILDRIL system	X		X	X	X			LU		TE
M-I SWACO	SILDRIL K	Potassium silicate version for the SILDRIL system	X		X	X	X			SH		E
M-I SWACO	SILDRIL L	Liquid sodium silicate	X		X	X	X			SH	LU	
M-I SWACO	SIL-LUBE	LU for the SILDRIL system	X		X	X	X			LU		FR
M-I SWACO	SP-101	Sodium polyacrylate	X	X		X	X	X		FR	SH	
M-I SWACO	SPERSENE	Chrome lignosulfonate	X	X	X	X	X			TH	FR	
M-I SWACO	SPERSENE CF	Chrome-free lignosulfonate	X	X	X	X	X			TH	FR	
M-I SWACO	SPERSENE CFI	Iron lignosulfonate	X	X	X	X	X			TH		
M-I SWACO	SPERSENE I	Ferrocchrome lignosulfonate	X	X	X	X	X			TH	TE	
M-I SWACO	STABLETROL	Slightly cross-linked CM-starch	X	X	X	X	X			FR		
M-I SWACO	STARGLIDE	LU and ROP enhancer	X	X	X	X	X			LU		
M-I SWACO	STEEL LUBE EP	Extreme pressure LU	X	X	X	X	X			LU	FR	
M-I SWACO	SULFATREAT 410 HP	Odor control agent and H2S scavenger	X	X	X	X	X			CO		
M-I SWACO	SULFATREAT DFS	H2S scavenger	X	X	X	X	X			CO		FR
M-I SWACO	SULFATREAT XLP	Extended life H2S scavenger	X	X	X	X	X			CO		SH
M-I SWACO	SUPRAVIS	High-performance V	X	X	X	X	X			V		FR
M-I SWACO	SUREMOD	V, gelling agent for syn. fluid emulsion muds						X		V		E
M-I SWACO	SUREMUL	Primary E for syn. fluid emulsion muds						X	E	SU		TH
M-I SWACO	SUREMUL EH	Primary E for syn. fluid emulsion muds						X	E	FR		
M-I SWACO	SUREMUL PLUS	High performance E for invert emulsion muds						X	E	SU		
M-I SWACO	SURETHIN	TH for synthetic system						X	TH	SU		
M-I SWACO	SUREWET	Wetting agent for syn. fluid emulsion muds						X	SU	E		
M-I SWACO	SV-120	Hydrogen sulfide scavenger for cold climates						X		CO		E
M-I SWACO	SWA EH	OBM wetting agent for high brine-content sys.						X		SU	E	
M-I SWACO	TACKLE	Liquid low M.W. polyacrylate	X	X		X	X			TH		
M-I SWACO	TACKLE DRY	Powdered low M.W. polyacrylate	X	X		X	X			TH		
M-I SWACO	TANMATHIN	Ground lignite	X	X	X	X	X			TH	FR	
M-I SWACO	TARCLEAN	Anticrete for heavy oil to thin asphaltenes				X				SH		
M-I SWACO	TARLIFT	Solvent mixture for the SAGDRIL system				X	X			SU		
M-I SWACO	TARSURF	Water-wetter for the SAGDRIL system				X	X			SU		
M-I SWACO	TARVIS L	Liquid V for the SAGDRIL system				X	X			V		
M-I SWACO	THINSMART	Thinner	X	X	X	X	X			TH		
M-I SWACO	THRUCARB	Carbonate for the FLOTHRU system	X				X			FR		
M-I SWACO	THRUCARB 20	Carbonate for the FLOTHRU system	X				X			FR		
M-I SWACO	THRUOTROL	Hydrophobic starch for the FLOTHRU system	X				X			FR		
M-I SWACO	TROL-PLEX	Modified starch			X					FR		
M-I SWACO	TRUVIS	V for TRUDRIL system						X		V	FR	
M-I SWACO	ULTRACAP	Encapsulator for the ULTRADRIL system				X	X	X		SH		
M-I SWACO	ULTRACAP NS	Biodegradable shale encapsulator				X	X	X		SH		
M-I SWACO	ULTRACAP P	Encapsulator for the ULTRADRIL system - powder				X	X	X		SH		
M-I SWACO	ULTRACAP PLUS	Polymeric shale inhibitor for the ULTRADRIL system				X	X	X		SH		
M-I SWACO	ULTRAFREE	ROP enhancer for the ULTRADRIL system				X	X	X		SU	LU	
M-I SWACO	ULTRAFREE II	ROP enhancer for the ULTRADRIL system especially with PDC bits				X	X	X		SU	LU	
M-I SWACO	ULTRAFREE L	ROP enhancer for the ULTRADRIL system designed for land use				X	X	X		SU	LU	
M-I SWACO	ULTRAFREE NH	Non-hydrocarbon version of ULTRAFREE				X	X	X		SU	LU	
M-I SWACO	ULTRAFREE NS	ROP enhancer for the ULTRADRIL system in the North Sea				X	X	X		SU	LU	
M-I SWACO	ULTRAHIB	Shale inhibitor for the ULTRADRIL system				X	X	X		SH		
M-I SWACO	ULTRAHIB NS	ULTRAHIB variant for the North Sea				X	X	X		SH		
M-I SWACO	UNIPAC SUPREME R	Modified PAC	X	X	X	X	X			FR		TE
M-I SWACO	UNIPAC SUPREME UL	Modified PAC, ultra-low viscosity	X	X	X	X	X			FR	SH	TE
M-I SWACO	UNITROL	Polysaccharide	X	X	X	X	X			FR		TE
M-I SWACO	VERSACLEAN B	Base fluid for the VERSACLEAN system						X		TH	LU	
M-I SWACO	VERSACOAT	E for oil mud						X		E	SU	
M-I SWACO	VERSACOAT HF	E for oil mud						X		E	SU	
M-I SWACO	VERSACOAT NA	High flash point version of VERSACOAT						X		E	SU	
M-I SWACO	VERSADRIL B	Base oil for the VERSADRIL system						X		TH	LU	
M-I SWACO	VERSAGEL HT	Hectorite						X		V	FR	V
M-I SWACO	VERSALIG	Modified lignite for oil muds						X		FR		
M-I SWACO	VERSALUBE	Oil-soluble LU						X	X	LU		
M-I SWACO	VERSAMOD	Oil mud gelling agent and V modifier						X	X	V		
M-I SWACO	VERSAMUL	Basic E package for oil muds						X	E	FR		
M-I SWACO	VERSAPAC	Thermally-activated organic thixotrope						X	X	V	LO	
M-I SWACO	VERSAPRO P/S	Primary E for VERSAPRO system						X		E		
M-I SWACO	VERSATHIN	Oil mud dispersant						X		TH		



# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Alr, mist, foam, gas
M-I SWACO	VERSATHIN HF	Version of VERSATHIN made with VER-SACOAT HF						X		TH
M-I SWACO	VERSATRIM	Reduces oil retained on cuttings						X		SU
M-I SWACO	VERSATROL	Naturally occurring asphaltene								FR
M-I SWACO	VERSATROL HT	High-temp. asphaltene						X		FR
M-I SWACO	VERSATROL NS	Lignite/asphaltene blend for HPHT filtration control						X		FR
M-I SWACO	VERSAVERT B	Base fluid for VERSAVERT system						X		TH LU
M-I SWACO	VERSAVERT BT	Thin version of worker-friendly base oil						X		TH LU
M-I SWACO	VERSAWET	Wetting agent for oil mud						X		SU E
M-I SWACO	VERT-TROL	Asphaltic fluid-loss additive						X		FR
M-I SWACO	VG-69	Organophilic clay						X		V
M-I SWACO	VG-PLUS	Organophilic clay						X	X	V FR
M-I SWACO	VG-SUPREME	Organophilic clay						X		V FR
M-I SWACO	VINSEAL COARSE	Coarse-grind filtration agent and electric stability agent	X	X	X	X	X	X		FL
M-I SWACO	VINSEAL FINE	Fine-grind filtration agent and electric stability agent	X	X	X	X	X	X		FL
M-I SWACO	VINSEAL MEDIUM	Medium-grind filtration agent and electric stability agent	X	X	X	X	X	X		FL
M-I SWACO	WARP CONCENTRATE, OB	High-density colloidal suspension						X	X	W
M-I SWACO	WARP CONCENTRATE, WB	High-density colloidal suspension	X	X	X	X	X			W
M-I SWACO	WARP DRY OB	High-grade micronized barite chemically-treatment enhanced						X	X	W
M-I SWACO	WARP DRY CC	High-grade micronized calcium carbonate chemically-treatment enhanced						X	X	W
M-I SWACO	WARP HPHT PREMIX	HPHT premix for WARP systems	X	X	X	X	X			W FR
M-I SWACO	WARP OB PREMIX	OB premix for WARP systems						X	X	W FR
M-I SWACO	WARP UF	Dry micronized barite not pneumatically transferable	X	X	X	X	X	X	X	W FR
M-I SWACO	WELLZYME A	Enzymatic polymer breaker for water-based reservoir drill-in fluids				X	X	X		BR
M-I SWACO	WELLZYME III	Enzymatic polymer breaker for water-based reservoir drill-in fluids registered for North Sea use				X	X	X		BR SH
M-I SWACO	XP-20 N	Chrome lignite, sodium hydroxide, neutralized			X	X	X	X		TE TH
M-I SWACO	XP-20K	Potassium chrome lignite			X	X	X	X		TE TH
Montello	HME ENERGIZER	Selective non-ionic SU for wetting asphalt and asphalt-like prod.	X	X	X	X	X	X		SU V
Montello	MON PAC	Polyanionic cellulose	X	X	X	X	X			FR V V
Montello	MON PAC ULTRA LO	Low-viscosity polyanionic cellulose	X	X	X	X	X			FR SH
Nalco	ASP 185	Multipurpose FO; anionic, hydrocarbon tolerant								FO
Nalco	ASP 700	High MW V/shale stabilizer	X	X	X	X		X	SH	FR E
Nalco	ASP 713	High MW V/shale stabilizer	X	X	X	X		X	SH	FR SU
Nalco	EC9349A	High MW latex polymer; anionic viscosifier, shale stabilizer								V SH SU
Nalco	N-9806	Shale stabilizer		X	X					SH V SU
Newpark	CyberCoat	Wetting agent						X	X	TH SU E
Newpark	CyberMol	Emulsifier						X	X	E SU FR
Newpark	CyberPlus	Low-toxicity emulsifier						X	X	E SU FR
Newpark	CyberSeal	Lost circulation material	X	X	X	X	X	X	X	LO FR
Newpark	CyberTrol	HPHT fluid loss additive						X		FR HPHT
Newpark	CyberVis DW50	Polymeric rheological modifier						X	X	V
Newpark	CyberVis RM	Polymeric rheological modifier						X	X	V E FR
Newpark	DeepDrill Inhibitor	Proprietary HPWB shale inhibitor	X	X	X	X	X	X		SH HS HPWB
Newpark	DynaDet	Detergent	X	X	X	X	X	X		SU
Newpark	DynaFiber	Micronized cellulose fibers	X	X	X	X	X	X	X	LO FR
Newpark	DynaFree	Unweighted spotting fluid	X	X	X	X	X			P
Newpark	DynaLose CM	Modified starch	X	X	X	X	X			FR V
Newpark	DynaLose W	White starch	X	X	X	X	X			FR
Newpark	DynaLose Y	Yellow starch	X	X	X	X	X			FR
Newpark	DynaNite	Asphaltite fluid loss control agent	X	X	X	X	X	X	X	FR SH LU
Newpark	DynaPlex	HPHT fluid loss additive	X	X	X	X	X			FR HPHT
Newpark	DynaVert SFT	One sack weightable spotting fluid	X	X	X	X	X			P
Newpark	EvoCan	Fluid conditioner	X	X	X	X	X			TH
Newpark	EvoLube DPE	HPHT drilling performance enhancer	X	X	X	X	X			LU HPWB HPHT
Newpark	EvoLube S	Drilling performance enhancer	X	X	X	X	X			LU SH HPWB
Newpark	EvoMod	HPHT synthetic low-end rheology modifier	X		X	X				V HPHT HPWB
Newpark	EvoTrol	Anionic fluid loss control agent	X	X	X	X	X			FR
Newpark	EvoVis	HPHT polymeric viscosifier	X		X	X				V HPHT HPWB
Newpark	FlexFirm	Potassium silicate shale stabilizer	X	X	X	X	X			SH HPWB
Newpark	FlexThin HTZ	Zirconium complexed thinner	X	X	X	X	X			TH TE FR
Newpark	GageCon	Anion suppressor	X		X					AC FR
Newpark	GageTrol	Fluid loss control	X	X	X	X	X			FR RDF
Newpark	GageVis	MMO			X					V
Newpark	HiPerm	Amine clay stabilizer	X		X	X	X			RDF SH HPWB
Newpark	LST-Md	Liquid sulfonated asphalt	X	X	X	X	X			SH FR HPWB
Newpark	New100N	Water-activity control agent	X	X	X	X	X			SH HS HPWB
Newpark	NewArmor	Film forming amine corrosion inhibitor	X	X	X	X	X			CO
Newpark	NewBar	4.2 SG Barite	X	X	X	X	X	X	X	W
Newpark	NewBridge	Sweep/bridging material	X	X	X	X	X	X	X	LO WBC
Newpark	NewCarb (F.M.C)	Sized calcium carbonate	X	X	X	X	X	X	X	LO W
Newpark	NewCarb Ultimix	Coarse calcite/marble with precise PSD	X	X	X	X	X	X	X	LO W
Newpark	NewEdge	High-grade humate	X	X	X	X	X	X	X	FR TH E
Newpark	NewFlow	Ferrochrome lignosulfonate	X	X	X	X				TH FR E
Newpark	NewGel	Bentonite	X	X	X	X	X			V FR WBC
Newpark	NewGel NT	Untreated bentonite	X	X	X	X	X			V FR WBC

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**AC** = Anionic control  
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**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Alr, mist, foam, gas
Newpark	NewLig	Lignite	X	X	X	X	X			FR TH E
Newpark	NewPac PR	Premium-grade Polyanionic cellulose	X	X	X	X	X			FR V
Newpark	NewPac R	Polyanionic cellulose	X	X	X	X	X			FR V
Newpark	NewPacLV	Polyanionic cellulose	X	X	X	X	X			FR V
Newpark	NewPacPLV	Premium-grade Polyanionic cellulose	X	X	X	X	X			FR V
Newpark	NewPhalt	Sulphonated asphalt	X	X	X	X	X	X	X	SH FR
Newpark	NewPhase	Water-activity control agent						X	X	SU SH
Newpark	NewPHPA	High-MW anionic polyacrylamide	X	X	X	X	X			SH V LU
Newpark	NewPHPA D	High-MW anionic polyacrylamide	X	X	X	X	X			SH V LU
Newpark	NewPHPA DLMW	Low-MW anionic polyacrylamide	X	X	X	X	X			SH
Newpark	NewPHPA DSL	Very low-MW anionic polyacrylamide	X	X	X	X	X			SH
Newpark	NewPlug (F.M.C)	Nut shells	X	X	X	X	X	X	X	LO WBC
Newpark	NewSeal	Sized carbonaceous seepage agent	X	X	X	X	X	X	X	LO
Newpark	NewStabil	Alkaline buffering agent	X	X	X	X	X			A TE
Newpark	NewWate	4.1 SG Barite	X	X	X	X	X	X	X	W
Newpark	NewZan D	Xanthum gum	X	X	X	X	X			V FR WBC
Newpark	NoFoam A	Alcohol-based defoamer	X	X	X	X	X			D
Newpark	NoFoam X	Concentrated defoamer	X	X	X	X	X			D
Newpark	OptiClean	General purpose cleaning agent	X	X	X	X	X			SU
Newpark	OptiG	HPHT asphaltite	X	X	X	X	X	X	X	FR SH
Newpark	OptiLig	Amine treated lignite						X	X	FR HPHT
Newpark	OptiMul II	Primary emulsifier						X		E SU FR
Newpark	OptiPlus II	Secondary emulsifier						X		E SU FR
Newpark	OptiThin	Organic thinner						X		TH SU E
Newpark	OptiTrol	Polymeric HPHT FR						X		FR HPHT
Newpark	OptiVert	Primary emulsifier						X		E SU FR
Newpark	OptiVis RM	Polymeric rheological modifier						X		V E FR
Newpark	OptiWet	Oil wetting agent						X		SU E FR
Newpark	SpotSpot	Non-toxic organic spotting fluid	X	X	X	X	X			P
Newpark	X-Prima	One sack high solids, high fluid loss LCM squeeze	X	X	X	X	X	X	X	MLCM
NOV	AQUA-FILM CM	anionic, carboxymethyl starch filtration control additive	X	X	X	X	X			FR V
NOV	AQUA-FILM HP	non-ionic hydroxypropyl starch filtration control additive	X	X	X	X	X			FR
NOV	AQUA-FILM HT	anionic carboxymethyl starch filtration control additive for HPHT applications	X	X	X	X	X			FR
NOV	AQUA-FILM W	high purity pre-gelatinized white starch filtration control additive	X	X	X	X	X			FR
NOV	AQUA-FILM Y	pre-gelatinized yellow starch filtration control additive	X	X	X	X	X			FR
NOV	AQUA-FILM T	apioca starch-based filtration control additive	X	X	X	X	X			FR V
NOV	Ben-Ex	bentonite extender				X				V FR
NOV	BORE-SWELL	swelling lost circulation material for combating severe to total circulation losses	X	X	X	X	X			MLCM
NOV	Cedar Fiber	shredded cedar wood-based lost circulation control additive	X	X	X	X	X			LO
NOV	CHEMSPERSE	chrome lignosulfonate thinner	X	X		X				TH FL
NOV	CHEMSPERSE CF	chrome-free lignosulfonate thinner	X	X		X				TH FL
NOV	CHEMTEMP	high temperature deflocculant	X	X	X	X	X			TH FL
NOV	CLEAR-BREAK	de-emulsifier, emulsion breaker								BR
NOV	COR-CHEK OP	organo-phosphorus based corrosion inhibitor	X	X	X	X	X			CO
NOV	COR-CHEK APW	filming amine based corrosion inhibitor for fresh water	X	X	X	X	X			CO
NOV	COR-CHEK CA	corrosion inhibitor for high density calcium brines	X	X	X	X	X			CO
NOV	COR-CHEK HT	corrosion inhibitor for high temperature (>300°F) applications	X	X	X	X	X			CO
NOV	COR-CHEK O2	oxidative corrosion inhibitor/oxygen scavenger	X	X	X	X	X			CO
NOV	Cottonseed Hulls	lost circulation control material						X	X	LO
NOV	DE-2000 Plus	ROP enhancer	X	X	X	X	X	X	X	SU
NOV	DL-100	high performance drilling lubricant for aqueous and non-aqueous drilling fluids	X	X	X	X	X			LU SH
NOV	ECO-SYN FLR	fluid loss control additive for synthetic-based drilling muds						X		FR V
NOV	ECO-SYN PE	primary emulsifier for synthetic oil-based drilling muds						X		E FR
NOV	ECO-SYN SE	secondary emulsifier for synthetic oil-based drilling muds						X		E FR
NOV	ECO-SYN WA	wetting agent for synthetic oil-based drilling muds						X		SU E TH
NOV	ECO-SYN THIN	thinner for synthetic oil-based drilling muds						X		TH SU
NOV	ECO-SPERSE	oil dispersant	X	X	X	X	X	X	X	SU
NOV	ENVIRO-SLIK	environmentally friendly drilling lubricant, torque & drag reducer	X	X	X	X	X			LU FR HTHP
NOV	Enviroplug	lost circulation control additive for combating severe to total losses	X	X	X	X	X			LO
NOV	FLO-MOD LE	polymer-based low end rheology modifier for diesel based drilling fluids						X	X	V
NOV	FLO-MOD TA	trimer acid based low end rheology modifier for diesel based drilling fluids						X	X	V
NOV	FOAM-OUT A	alcohol based defoamer	X	X	X	X	X			D
NOV	FOAM-OUT S	silicone based defoamer	X	X	X	X	X			D
NOV	FRICION-EZE	general purpose drilling lubricant	X	X	X	X	X			LU
NOV	HDL Plus	high performance drilling lubricant for lateral drilling	X	X	X	X	X	X	X	LU CO
NOV	HEC-LINK 11	temporary crosslinked HEC fluid loss control gel for perforation operations								FR RDF
NOV	HEC-LINK 14	acid removable crosslinked HEC fluid loss control gel for completion brines								FR RDF

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Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based Air, mist, foam, gas			
NOV	HEC-VIS L	liquid HEC dispersion for workover and completion fluids			X	X			V		RDF
NOV	HEC-VIS	granular HEC viscosifier	X	X	X	X	X		V		
NOV	ISO-DRILL	liquid PHPA (30%) dispersion	X	X	X	X	X		SH	V	LU
NOV	ISO-DRILL Plus	liquid PHPA (50%) dispersion	X	X	X	X	X		SH	V	LU
NOV	ISO-DRILL RD	readily dispersible granular PHPA	X	X	X	X	X		SH	LU	
NOV	ISO-DRILL LV	low molecular weight granular PHPA	X	X	X	X	X		SH		LU
NOV	LIQUI-THIN	heavy metal free polymer based liquid thinner/deflocculant	X		X	X	X		TH	SH	
NOV	K-TROL	potassium-based inhibitor	X	X	X	X	X	X	V		
NOV	MAX-SPERSE	chrome tannin based thinner							TH		
NOV	MAX-SPERSE CF	chrome free, tannin based thinner							TH		
NOV	Mica	lost circulation control additive	X	X	X	X	X	X	LO		
NOV	NOV BAR	ground barium sulfate weighting material meeting API specs (sg=4.2)	X	X	X	X	X	X	W		
NOV	NOV CARB	ground and sized calcium carbonate bridging agent	X	X	X	X	X	X	LO	W	FL
NOV	NOV FIBER	ground and sized cellulosic lost circulation control additive	X	X	X	X	X	X	LO	FL	LU
NOV	NOV GEL	treated API spec. Wyoming Bentonite	X	X	X	X	X	X	V	FL	
NOV	NOV GEL HY	treated, high yield Bentonite	X	X	X	X	X	X	V	FL	
NOV	NOV GEL NT	non-treated, premium Wyoming bentonite, API spec.	X	X	X	X	X	X	V	FL	LU
NOV	NOV Graphite	sized amorphous graphite drilling lubricant and lost circulation control additive	X	X	X	X	X	X	LO	LU	
NOV	NOV LIG	lignite-based dispersant and fluid loss control additive	X	X	X	X	X		FL	TH	TE
NOV	NOV LIG R	resinated lignite	X	X	X	X	X		FL	TH	TE
NOV	NOV LIG K	potassium lignite dispersant and fluid loss control additive	X	X	X	X	X		FL	TH	SH
NOV	NOV LIG PH	causticized lignite filtration control additive/dispersant	X	X	X	X	X		FL	TH	
NOV	NOV OBM Seal	lost circulation control additive for non-aqueous drilling fluids						X	LO	FR	
NOV	NOV PAC LV	low viscosity polyanionic cellulose fluid loss control additive	X	X	X	X	X			FR	
NOV	NOV PAC R	polyanionic cellulose fluid loss control additive	X	X	X	X	X			FR	V
NOV	NOV PAC Plus	polyanionic cellulose fluid loss control additive, high purity	X	X	X	X	X			FR	V
NOV	NOV PAC Plus LV	low molecular weight polyanionic cellulose fluid loss control additive, high purity	X	X	X	X	X			FR	
NOV	NOV PLUG	ground and sized nut shell based lost circulation control additive	X	X	X	X	X	X	LO		
NOV	NOV WATE	ground barium sulfate weighting agent (SG = 4.1)	X	X	X	X	X	X	W		
NOV	NOV WATE 4.0	ground barium sulfate weighting agent (SG = 4.0)	X	X	X	X	X	X	W		
NOV	NOV XAN D	granular high molecular weight xanthan gum plus dispersant	X	X	X	X	X		V	RDF	
NOV	NOV XAN L	high molecular weight xanthan gum dispersion	X	X	X	X	X		V	RDF	
NOV	NOV XAN ND	granular, non-dispersible xanthan gum	X	X	X	X	X		V		
NOV	XanVis Liquid	high purity, clarified, readily dispersible xanthan gum	X		X				WBC	V	RDF
NOV	PAVE-BLOK	non-damaging, carbon-based lost circulation control additive	X	X	X	X	X	X	LO		
NOV	PAVE-PLEX	sulfonated asphalt/causticized lignite blend shale stabilizer and fluid loss control additive	X	X	X				FR	SH	
NOV	PAVE-TEX	sulfonated asphalt shale stabilizer and fluid loss control additive	X	X					SH	FR	
NOV	PERM-CON	de-emulsifier, emulsion breaker, wetting agent							BR	SU	
NOV	PETRO-MUL I	Primary emulsifier for PETROS diesel muds						X	E	FR	
NOV	PETRO-MUL I HT	Primary emulsifier for PETROS diesel muds at high application temperatures						X	E	FR	
NOV	PETRO-MUL II	secondary emulsifier for PETROS diesel inert muds						X	E	SU	
NOV	PETRO-MUL II HT	Secondary emulsifier for PETROS diesel muds at high application temperatures						X	E	SU	
NOV	PETRO-WET	Wetting agent for PETROS diesel muds						X	SU	E	
NOV	PETRO-WET T	Concentrated wetting agent and thinner for PETROS diesel muds						X	SU	E	TH
NOV	PETRO-THIN	thinner for PETROS diesel inverts						X	TH	SU	E
NOV	PETRO-SORB	absorbant solid for aqueous and non-aqueous spills									
NOV	PIPE-FILM H	filming amine corrosion inhibitor for hard brines	X	X	X	X	X	X	CO		
NOV	Poly-Plug	crosslinking LCM for moderate to severe lost circulation	X	X	X	X	X	X	MLCM		
NOV	POLY-SPA	HTHP fluid loss control additive for aqueous drilling fluids							FR		HTHP
NOV	PREMA-VIS	organophilic bentonite						X	V	FR	E
NOV	PREMA-VIS Plus	high performance organophilic bentonite						X	V	FR	E
NOV	PREMA-VIS HT	organophilic hectorite for high temperature applications						X	V	FR	HPHT
NOV	PRO-GUARD H2S	hydrogen sulfide scavenging additive	X	X	X	X	X	X	CO		
NOV	SEAL-UP	blended lost circulation control additive	X	X	X	X	X	X	LO	FL	
NOV	Shur-Plug	ground hardwood lost circulation control additive	X	X	X	X	X		LO		
NOV	Salt Gel	Attapulgitic, saltwater gel	X	X	X	X	X		V		
NOV	SO/LO-VIS	Rheology control and suspension aide for organophilic clay-free SO/LO™ diesel invert drilling fluids						X	V	FL	E

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**E** = Emulsifiers  
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**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
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**TH** = Thinner, dispersants  
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**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based Air, mist, foam, gas			
NOV	SO/LO-TROL	Fluid loss control additive for organophilic clay-free SO/LO™ diesel invert drilling fluids						X			FL
NOV	STARTROL	HPHT fluid fluid loss control additive and shale stabilizer	X	X	X	X	X	X	LO	HTHP	
NOV	STIK-FREE	diesel based spotting fluid	X	X	X	X	X	X	P		
NOV	STIK-FREE W	weightable diesel-based spotting fluid	X	X	X	X	X	X	P		
NOV	STIK-FREE ECO	Environmentally friendly spotting fluid	X	X	X	X	X	X	P		
NOV	STIK-FREE ECO W	weightable, environmentally safe spotting fluid	X	X	X	X	X	X	P		
NOV	STRES-FREE	flow line friction reducer									
NOV	SUPR-RATE	ROP enhancing additive	X	X	X	X	X	X	SU	TH	LU
NOV	SURF-FREE CB	surfactant package for stimulation treatment							SU		
NOV	TENSION-EZE	drilling detergent	X	X	X	X	X	X	SU		
NOV	TERALINE	biodegradable, organic clay stabilizer	X	X	X	X	X	X			
NOV	TERAPERM	high performance quaternary amine-based permanent clay stabilizer	X	X	X	X	X	X	SH		
NOV	TERAPLUS	concentrated, reduced toxicity clay stabilizer, KCl substitute	X	X	X	X	X	X	SH		
NOV	TERASTAY	temporary clay stabilizer, KCl substitute	X	X	X	X	X	X	SH		
NOV	TRAXX Block	shale control additive for POLYTRAXX system	X	X	X	X	X	X	SH	HPWB	
NOV	TRAXX TC	high performance shale control additive, ROP enhancing additive for POLYTRAXX	X	X	X	X	X	X	SH	HPWB	
NOV	TRIPLE A	Anti-accretion additive for drilling applications	X	X	X	X	X	X	LU	FR	
NOV	TRU-FLUSH	Casing wash, surfactant	X	X	X	X	X	X	WBC		
NOV	TRU-FLUSH A	casing wash	X	X	X	X	X	X	WBC		
NOV	ULTRA-BEADS CP	spherical copolymer bead lubricant, reduces torque & drag	X	X	X	X	X	X	LU		
NOV	ULTRA-BEADS G	spherical glass bead lubricant, torque & drag reduction	X	X	X	X	X	X	LU		
NOV	VAPR G	clouding glycol shale control agent for salinities up to 150,000ppm							SH	LU	
NOV	VAPR P	clouding glycol shale control agent for salinities >150,000ppm							SH	LU	
NOV	VAPR S	clouding glycol shale control agent for salinities <150,000ppm							SH	LU	
NOV	Walnut Shells	ground and sized walnut shells for regaining lost circulation	X	X	X	X	X	X	LO	FR	
NOV	WASH-UP	liquid surface cleaner/degreaser							SU		
NOV	WASH-UP ECO	environmentally friendly liquid cleaner/degreaser							SU		
NOV	WASH-UP Dry	granular cleaner/degreaser							SU		
NOV	Gilsonite Dispersion	Gilsonite suspension in synthetic oil	X	X	X	X	X	X	FR	SH	
NOV	Gilsonite	granular, sized Gilsonite for controlling filtrate losses						X	FR	SH	
Oleon	RADIAGREEN BDMF	Environmentally friendly synthetic-based							X	SB	LU
Oleon	RADIAGREEN BDMF VLV	Environmentally friendly synthetic-based							X	SB	LU
Oleon	RADIAGREEN CLO	Stimulation additive and mud cake breaker							X	SU	TH
Oleon	RADIAGREEN CLW	Surface and cased hole cleaner	X	X	X	X	X	X	SU		
Oleon	RADIAGREEN EBL	Ester-based LU for water-based muds	X	X	X	X	X	X	LU	P	
Oleon	RADIAGREEN EBO	Multi purposes environmentally friendly LU and ROP enhancer	X	X	X	X	X	X	LU	P	
Oleon	RADIAGREEN EME SALT	Environmentally friendly LU for heavy brines	X	X	X	X	X	X	LU	P	
Oleon	RADIAGREEN EMUL	Oil mud emulsifier						X	E	SU	
Oleon	RADIAGREEN RA	Reservoir enhancer	X	X	X	X	X	X	SU		
Oleon	RADIAGREEN SL	Environmentally friendly LU for high ph water-based (silicate muds)	X	X	X	X	X	X	LU	P	
Oleon	E-24	Blend of emulsifying & wetting agents	X	X	X	X	X	X	E	LU	
Oleon	EMS 6+	Rheology modifier							X	V	
Oleon	Drilling Lube	Lubricant for OBM							X	LU	P
Oleon	LCM MICA	Fine, Medium and Coarse mica							LO		
PICO	ANTIFOAM HD	Defoamer for high density fluids			X				D		
PICO	BRINE VIS HB	Rheology modifier for heavy brines				X			V		
PICO	DENSE CORR	CO for high density fluids			X				CO		FR
PICO	DFT BAR	API Barite	X	X	X	X	X	X	W		
PICO	DFT BIPOLY	Xanthan gum	X	X	X	X	X	X	V		
PICO	DFT BRINE VIS	Hydroxyethylcellulose	X	X	X	X	X	X	V	FR	
PICO	DFT CARB	Calcium carbonate	X	X	X	X	X	X	LO	W	
PICO	DFT C-BRIDGE	Biodegradable cellulosic LCM	X	X	X	X	X	X	LO		
PICO	DFT CFL	Chrome free lignosulfonate	X	X	X	X	X	X	TH	FR	
PICO	DFT CIDE L	Bactericide	X	X	X	X	X	X	B		
PICO	DFT CIDE P	Granular bactericide	X	X	X	X	X	X	B		LU
PICO	DFT CON	Secondary emulsifier						X	E	SU	
PICO	DFT CORR (B)	Brine soluble filming amine						X	CO		
PICO	DFT CORR (D)	Corrosion inhibitor for drilling fluids	X	X	X	X	X	X	CO		
PICO	DFT DETERGENT	Drilling detergent	X	X	X	X	X	X	SU	E	
PICO	DFT DI TROL	Modified starch for drill-in fluids	X	X	X	X	X	X	FR	V	
PICO	DFT DRILL-IT ACC	HPWBM ROP enhancer, DRILL-IT system	X		X	X	X	X	SU	LU	
PICO	DFT DRILL-IT CAP	HPWBM encapsulator, DRILL-IT system	X		X	X	X	X	SH		
PICO	DFT DRILL-IT INHIB	HPWBM shale inhibitor, DRILL-IT system	X		X	X	X	X	SH		FR
PICO	DFT FLOC	Well-bore clean-up flocculant			X	X	X	X	FL		
PICO	DFT GEL	APV/OCMA Bentonite	X	X	X	X	X	X	V	FR	
PICO	DFT GILSONITE (AD)	Water dispersible gilsonite	X	X	X	X	X	X	SH	LU	TE
PICO	DFT GLYCOL	Wide range molecular weight glycol	X	X	X	X	X	X	SH	LU	TE
PICO	DFT HSS	Hydrogen sulfide scavenger	X	X	X	X	X	X	CO		
PICO	DFT LCM PLUG	Massive lost circulation material	X	X	X	X	X	X	MLCM		
PICO	DFT LIG	Causticized lignite	X	X	X	X	X	X	TH	FR	
PICO	DFT LIGNITE	Lignite	X	X	X	X	X	X	TH	FR	SH
PICO	DFT LUBE	Lubricant for WBM	X	X	X	X	X	X	LU		
PICO	DFT MgO	Magnesium oxide for alkalinity control	X		X	X	X	X	A	FL	
PICO	DFT MUL	Primary emulsifier						X	E	FR	FL

A	= Alkalinity (pH control)	CO	= Corrosion inhibitors	HPHT	= High pressure
AC	= Anionic control	D	= Defoamers	HPWB	= High performance water based
B	= Bactericides	E	= Emulsifiers	HS	= Hydrate
BR	= Breakers	FR	= Filtrate reducers	LO	= Lost circulation
CA	= Calcium removers	FL	= Flocculants	LU	= Lubricant
CF	= Completion fluid	FO	= Foaming agents	MLCM	= Massive loss of cement

Available from:	Product tradename	Description of material	Non-dispersible	Dispersible	Calcium	Polymers	Low solids	Saturable	Oil-based	Synthetic	Airline	Primary	Secondary	Specialty
Rapid	RAPID SHALE-FIX RD	PHPA polymer powder	X	X		X	X	X				X	X	
Rapid	RAPID SPERSE	Asphalt/Gilsonite coupler	X	X	X	X	X	X				E		
Rapid	RAPID SPOT	Synthetic stuck pipe spotting fluid concentrate	X	X	X	X	X	X		X		P	LU	
Rapid	RAPID SUPER SEAL	Squeeze and seepage graded material	X	X	X	X	X	X	X	X	MCM			
Rapid	RAPID SURF 300	Well cleaning synthetic solvent	X	X	X	X	X	X	X			SU	WBC	FR
Rapid	RAPID SURF 400	Well cleaning Surfactant	X	X	X	X	X	X				SU	WBC	FR
Rapid	RAPID SURF 500	Flocculating Surfactant	X	X	X	X	X	X				SU	WBC	
Rapid	RAPID SURF 600	Well cleaning Surfactant	X	X	X	X	X	X				SU	WBC	
Rapid	RAPID SV I	Primary emulsifier							X			E	TE	FR
Rapid	RAPID SV II	Secondary emulsifier							X			E	SU	
Rapid	RAPID SV VISCOSIFIER	Organo-bentonite							X	X		V	FR	FR
Rapid	RAPID SV-G	Oil mud gilsonite							X			FR	TE	
Rapid	RAPID TOPHOLE	Polymer drill fluid system		X		X	X					SH	LU	LU
Rapid	RAPID TOPHOLE THV	Polymer for TopHole system	X			X	X	X				SH	V	
Rapid	RAPID TWA	Oil wetting agent							X	X		TH	E	
Rapid	RAPID WELL FLUSH	Synthetic biodegradable solvent	X	X		X	X	X	X	X		SU	WBC	
Rapid	RAPID BLACK	Gilsonite slurry in a glycol-glycerol carrier	X	X	X	X	X	X				SH	FR	
RIG-CHEM	RC CC-1250M	Surfactant blend, wellbore and displ. clean-up				X	X	X	X	X		WBC	SU	
RIG-CHEM	RC D&D3	Surfactant blend, wellbore and displ. clean-up				X	X	X	X		X	WBC	SU	
RIG-CHEM	RC DEFOAMER W1	Silicone emulsion D		X		X	X	X			X	D		
RIG-CHEM	RC GREEN MAGIC	Biodegradable general purpose cleaner concentrate				X	X	X	X			SU	WBC	
RIG-CHEM	RC PAK-3	Packer fluid CO				X	X					CO	CF	
RIG-CHEM	RC PDR-4000	Pickling solvent							X	X		SU		
RIG-CHEM	RC PDR-6000	Pickling solvent							X	X		SU		
RIG-CHEM	RC PIQOUT-404	Oil soluble pipeline cleaner					X		X			TH		
RIG-CHEM	PROTECTOL C	Surface cleaner and protectant		X	X	X	X	X				SU		CF
RIG-CHEM	RC RIGFOAM-3	Foamer		X							X	FO		CF
RIG-CHEM	RC RIGVIS-EH	Environmentally-safe HEC suspension				X	X	X				V	LO	
RIG-CHEM	RC RIGXAN-1 plus	Environmentally-safe XC suspension				X	X	X			X	V	LO	
RIG-CHEM	RC VERSAFLOC LHD+	FL polymer, wellbore and displ. and cleanup				X	X	X				FL	WBC	
RIG-CHEM	RC-3	Neutral cleaner concentrate				X	X	X				SU		
RIG-CHEM	RC-4	Cleaner concentrate for synthetic muds				X	X	X	X	X		SU		
RIG-CHEM	RC-7	General purpose cleaner concentrate				X	X	X	X			SU		
RIG-CHEM	RC-8	General purpose cleaner concentrate				X	X	X	X			SU		
RIG-CHEM	TREAT O CLA	Clay Stabilizer	X	X		X	X	X				SH	E	
Roquette	AMIDON MDF 12	OSA starch				X	X					E		
Roquette	AMIDON M-SE 180P	CWS starch				X						FR		
Roquette	CLEARGUM CO 01	OSA starch				X						E		
Roquette	GLUTEN DE MAIS	Vegetal protein				X								
Roquette	POLYSORB 70/12 - HYDROGENATED GLUCOSE	Polys in solution					X					LU		
Roquette	POLYSORB 75/05/75	Polys in solution					X					HPHT	LU	
Roquette	SODIUM GLUCONATE	Crystalline powder						X				HPHT	CO	
Roquette	TACKIDEX N-735	Pea starch				X						V		
Scomi	AS100	Acid generating product for use in breaker fluids	X	X	X	X	X	X				P		
Scomi	BREAK-FREE	Weighted spotting fluid	X	X	X	X	X	X				P		
Scomi	BREAK-FREE NW	Non weighted spotting fluid	X	X	X	X	X	X				P		
Scomi	CDEEP-BAR	Fine grind barite for CONFI-DEEP system	X	X	X	X	X	X	X	X		W		
Scomi	CDEEP-MOD	Flat rheology modifier for CONFI-DEEP							X	X		V		
Scomi	CDEEP-MUL	Emulsifier for CONFI-DEEP							X	X		E		
Scomi	CDEEP-RM	Secondary rheology modifier for CONFI-DEEP							X	X		V		FR
Scomi	CDEEP-THIN	TH for CONFI-DEEP							X	X		TH		
Scomi	CDEEP-THIN II	TH for CONFI-DEEP							X	X		TH		
Scomi	CDEEP-TROL	FR for CONFI-DEEP							X	X				
Scomi	CIRRUS CPG	Low-Cloud point glycol for shale control	X		X	X	X					SH	LU	
Scomi	CONFI-BIO SURF	Well Bore clean up with low environmental impact							X	X		WBC		
Scomi	CONFI-EMUL P	Primary emulsifier							X	X		E	FR	
Scomi	CONFI-EMUL S	Secondary emulsifier							X	X		E	FR	
Scomi	CONFI-GEL	Organophilic clay							X	X		V	FR	HPHT
Scomi	CONFI-GEL PLUS	Organophilic clay							X	X		V??	V	FR
Scomi	CONFI-GEL HT	Organophilic Hecitorite clay							X	X		V	FR	
Scomi	CONFI-GEL II	Organophilic clay							X	X		V	FR	
Scomi	CONFI-GEL XHT	HPHT V for NAF							X	X		V	FR	HPHT
Scomi	CONFI-KLEEN	Blend of surfactants and solvents designed to suspend solids							X	X		WBC		HPHT
Scomi	CONFI-LUBE	Ester-based lubricant							X	X		LU	FR	HPHT
Scomi	CONFI-MOD	Viscosifier for OBM							X	X				HPHT
Scomi	CONFI-MOD HT	Viscosifier for OBM							X	X				
Scomi	CONFI-MOD XHT	Viscosifier for OBM for ultra HT							X	X				
Scomi	CONFI-MUL HT	Primary emulsifier for HT							X	X		E	FR	
Scomi	CONFI-MUL XHT	Primary emulsifier for Ultra HT							X	X		E	FR	
Scomi	CONFI-MUL P	Primary emulsifier							X	X		E	FR	
Scomi	CONFI-MUL S	Secondary emulsifier							X	X		E	FR	HPHT
Scomi	CONFI-MUL SA	Low temp. rheology							X	X		V	E	HPHT
Scomi	CONFI-PLEX	Synthetic polymer viscosifying agent for OBM							X	X		V		
Scomi	CONFI-RM	Viscosifier for OBM							X	X		V		
Scomi	CONFI-RM HT	Viscosifier for OBM for HT							X	X		V		
Scomi	CONFI-RM XHT	Viscosifier for OBM for Ultra HT							X	X		V		
Scomi	CONFI-SEAL	Organophilic Ignite							X	X		FR		
Scomi	CONFI-SPOT	Spotting agent for SBM							X	X		P		HPHT
Scomi	CONFI-SPOT PLUS	Well Bore Clean up for SBM							X	X		WBC	WBC	
Scomi	CONFI-SURF	WBC fluid							X	X		WBC		HPHT

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# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas
Scomi	CONFI-SURF PLUS	WBC fluid						X	X	WBC
Scomi	CONFI-TEC P	Emulsifier for low density systems						X	X	E
Scomi	CONFI-TEC HT	Secondary emulsifier for HT						X	X	E
Scomi	CONFI-TEC XHT	Secondary emulsifier for Ultra HT						X	X	E
Scomi	CONFI-THIN	TH for NAF systems						X	X	TH
Scomi	CONFI-TROL	FR for NAF						X	X	FR
Scomi	CONFI-TROL 400	VHT softening point gilsonite						X	X	FR
Scomi	CONFI-TROL 450	UHT softening point gilsonite						X	X	FR
Scomi	CONFI-TROL F	Liquid FR for NAF						X	X	FR
Scomi	CONFI-TROL HT	HT softening point gilsonite						X	X	FR
Scomi	CONFI-TROL VT	Proprietary FR and RM for OBM/SBM						X	X	FR
Scomi	CONFI-TROL EHT	Filtration and suspension control - Liquid						X	X	FR
Scomi	CONFI-TROL FHT	Filtration and suspension control - Liquid						X	X	FR
Scomi	CONFI-TROL HT	Filtration and suspension control for HT						X	X	FR
Scomi	CONFI-TROL XHT	Filtration and suspension control for Ultra HT systems						X	X	FR
Scomi	CONFI-TROL XHT L	Filtration and suspension control for HT						X	X	FR
Scomi	CONFI-TROL XHT LII	Filtration and suspension control for HT systems						X	X	FR
Scomi	CONFI-TROL L	Filtration and suspension control for HT						X	X	FR
Scomi	CONFI-TROL LII	Filtration and suspension control for Ultra HT systems						X	X	FR
Scomi	CONFI-VIS	HPHT V for NAF						X	X	V
Scomi	CONFI-VIS PLUS	HPHT V for NAF						X	X	V
Scomi	CONFI-WET	Oil-wetting agent						X	X	TH
Scomi	COR-MUSCLE	Three-in-one corrosion inhibitor						X	X	CO
Scomi	CS200	Chelator for use in breaker fluids	X	X	X	X	X			
Scomi	CUMULUS CPG	Cloud point glycol	X	X	X	X	X			
Scomi	DRILL-BAR	API barite	X	X	X	X	X	X	X	W
Scomi	DRILL-GEL	API bentonite	X	X	X	X	X			X
Scomi	DRILL-GEL UA	API non-treated Wyoming bentonite	X	X	X	X	X			X
Scomi	ES400	Enzyme for use in breaker fluids	X	X	X	X	X			X
Scomi	FERRO-THIN	Iron lignosulphonate	X	X	X	X	X			TH
Scomi	FIBRO-SEAL	Seepage loss control	X	X	X	X	X			LO
Scomi	FIBRO-SEAL C	Seepage loss control	X	X	X	X	X	X	X	LO
Scomi	FORM-8 C	Caesium formate brine						X	X	SH
Scomi	FORM-8 K	Potassium formate (dry)						X	X	SH
Scomi	FORM-8 N	Sodium formate (dry)						X	X	SH
Scomi	Glutaraldehyde	Glutaraldehyde biocide	X	X	X	X	X			X
Scomi	GUAR GUM	Guar gum	X	X	X	X	X			V
Scomi	HEC	Hydroxyethyl cellulose						X		V
Scomi	HYDRAMINE	Water-dispersible filming amine						X	X	CO
Scomi	HYDRO-BUFF	pH buffer and polymer extender	X	X						CO
Scomi	HYDRO-CAP L	Liquid, high molecular weight, PHPA polymer	X	X	X	X	X			SH
Scomi	HYDRO-CAP RD	Readily dispersible—HMW PHPA	X	X	X	X	X			SH
Scomi	HYDRO-CAP SC	Low MW PHPA	X	X	X	X	X			SH
Scomi	HYDRO-CAP XP	HMW PHPA	X	X	X	X	X			SH
Scomi	HYDRO-CHECK	Co-Polymer as deflocculant	X	X	X	X	X			TH
Scomi	HYDRO-DEFOAM	Multi purpose D	X	X	X	X	X			D
Scomi	HYDRO-DEFOAM A	Alcohol-based defoamer	X	X	X	X	X			D
Scomi	HYDRO-DEFOAM S	Low-toxicity D	X	X	X	X	X			D
Scomi	HYDRO-FILM	Filming amine	X	X	X	X	X			CO
Scomi	HYDRO-FLOCC	Bentonite extender	X							V
Scomi	HYDRO-HIB	Shale inhibitor	X	X	X	X	X			SH
Scomi	HYDRO-KLEEN	Bio-degradable detergent	X	X	X	X	X	X	X	SH
Scomi	HYDRO-LIG	Lignite	X	X	X	X	X			TH
Scomi	HYDRO-LIG C	Causticized lignite	X	X	X	X	X			FR
Scomi	HYDRO-LUBE	WBM lubricant	X	X	X	X	X			LU
Scomi	HYDRO-LUBE SL	WBM lubricant for silicate muds	X	X	X	X	X			LU
Scomi	HYDRO-LUBE SL PLUS	Premium WBM lubricant for silicate muds	X	X	X	X	X			LU
Scomi	HYDRO-MAX	Manganese tetroxide	X	X	X	X	X	X	X	W
Scomi	HYDRO-MD	Mud detergent	X	X	X	X	X			FR
Scomi	HYDRO-PAC LV	Polyanionic cellulose	X	X	X	X	X			FR
Scomi	HYDRO-PAC PLUS LV	Premium polyanionic cellulose	X	X	X	X	X			FR
Scomi	HYDRO-PAC PLUS R	Premium polyanionic cellulose	X	X	X	X	X			FR
Scomi	HYDRO-PAC R	Polyanionic cellulose	X	X	X	X	X			FR
Scomi	HYDRO-PAC UL	Polyanionic cellulose	X	X	X	X	X			FR
Scomi	HYDRO-PLAST	Sulphonated asphalt	X	X	X	X	X	X	X	SH
Scomi	HYDRO-PLAST PLUS	Premium sulphonated asphalt	X	X	X	X	X	X	X	SH
Scomi	HYDRO-PLUG	Nut shells	X	X	X	X	X	X	X	LO
Scomi	HYDRO-POL	Sodium polyacrylate	X	X	X	X	X			FR
Scomi	HYDRO-REZ	Polyanionic, lignin resin	X	X	X	X	X			FR
Scomi	HYDRO-SEAL G	Graphite bridging agent	X	X	X	X	X	X	X	LO
Scomi	HYDRO-SEAL G FINE	Graphite bridging agent—fine size	X	X	X	X	X	X	X	LO
Scomi	HYDRO-SIL K	Potassium silicate liquor	X							SH
Scomi	HYDRO-SIL S	Sodium silicate liquor	X							SH
Scomi	HYDRO-SPERSE	Chrome lignosulphonate		X	X					TH
Scomi	HYDRO-SPERSE CF	Chrome-free iron lignosulphonate		X	X					TH
Scomi	HYDRO-SPERSE HT	TH and TE for HT environments.	X	X	X	X	X			TH
Scomi	HYDRO-SPERSE RS	TH and TE for HT environments.	X	X	X	X	X			TH
Scomi	HYDRO-STAR CMS	Modified polysaccharide	X	X	X	X	X			FR
Scomi	HYDRO-STAR CMS PLUS	Modified polysaccharide	X	X	X	X	X			FR
Scomi	HYDRO-STAR HT	Modified starch	X	X	X	X	X			FR
Scomi	HYDRO-STAR NF	Non fermenting, polymerized starch	X	X	X	X	X			FR
Scomi	HYDRO-STARCH	Pregelatinised corn starch	X	X	X	X	X			FR
Scomi	HYDRO-TAN CF	Chrome-free, modified tannin		X	X					TH
Scomi	HYDRO-THERM	HT filtration control	X	X	X	X	X			TH
Scomi	HYDRO-THERM II	Acrylamide—AMPS copolymer	X	X	X	X	X			FR

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid  
**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents  
**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
Scomi	HYDRO-THIN	Liquid, low-molecular-weight anionic polymer	X	X			X	X	X		X	TH		
Scomi	HYDRO-THIN HT	TH for HT environments	X	X	X	X	X	X				TH	FR	
Scomi	HYDRO-THIN HT II	TH for HT environments	X	X	X	X	X	X				TH	FR	
Scomi	HYDRO-THIN HT L	TH for HT environments	X	X	X	X	X	X				TH	FR	
Scomi	HYDRO-THIN L	Liquid, low-molecular-weight anionic polymer	X	X			X	X			X	TH		
Scomi	HYDRO-WASH	WBC fluid	X	X	X	X	X	X	X	X		WBC		
Scomi	HYDRO-ZAN	Xanthan gum	X	X	X	X	X	X				V		
Scomi	HYDRO-ZAN L	Xanthan gum, liquid	X	X	X	X	X	X				V	RDF	
Scomi	HYDRO-ZAN PLUS	Xanthan gum, premium grade	X	X	X	X	X	X				V	RDF	
Scomi	HYDRO-ZAN PLUS RD	Xanthan gum, premium grade readily dispersible	X	X	X	X	X	X				V	RDF	
Scomi	HYDRO-ZAN RD	Xanthan gum, readily dispersible	X	X	X	X	X	X				V	RDF	
Scomi	HYDRO-ZAN T	Xanthan gum, technical grade	X	X	X	X	X	X				V	RDF	
Scomi	HYDRO-ZAN TRD	Xanthan gum, technical grade readily dispersible	X	X	X	X	X	X				V	RDF	
Scomi	HyPR-ACP	Co-Polymer as encapsulator and dispersant	X	X			X	X				SH	FR	
Scomi	HyPR-BAR	Fine grind barite	X	X	X	X	X	X	X	X		W		HPWB
Scomi	HyPR-CAP	Terpolymer for HPWBM	X	X	X	X	X	X				SH	FR	HPWB
Scomi	HyPR-CAP HM	Co-Polymer as encapsulator and flocculant	X	X			X	X				SH	FR	HPWB
Scomi	HyPR-CSP	Aminic Shale Inhibitor	X	X	X	X	X	X				SH		
Scomi	HyPR-STAR	Fluid Loss Control Agent for HPWBM	X	X	X	X	X	X				FR		
Scomi	HyPR-DRL	Bit and BHA balling preventer	X	X			X	X				SU	LU	
Scomi	HyPR-HIB	Ammonium salt inhibitor for HPWBM	X	X	X	X	X	X				SH		
Scomi	HyPR-LUBE	WBM lubricant	X				X	X				LU		
Scomi	HyPR-PLEX	Shale inhibitor for WBM	X	X	X	X	X	X				SH		
Scomi	ISOTHAZOLIN	Isotiazolin-based biocide	X	X	X	X	X	X			X	B		
Scomi	KXP-019	HT Emulsifier								X	X			
Scomi	KXP020	HT Fluid Loss additive								X	X			
Scomi	KXP-022	Deepwater Rheology Modifier								X	X			
Scomi	KXP-026	Ultra HT Emulsifier								X	X			
Scomi	KXP-029	Amine for use in HPWBM	X			X	X	X	X					
Scomi	LUBRI-GREEN	Ester-based lubricant	X	X			X	X	X			LU		FR
Scomi	LUBRI-GREEN II	Ester-based lubricant	X	X			X	X	X			LU		RDF
Scomi	MY-PAC LV	Tech grade PAC	X	X	X	X	X					FR		LO
Scomi	MY-PAC R	Tech grade PAC	X	X	X	X	X					FR		
Scomi	NIMBUS CPG	Cloud point glycol for saturated salt systems							X			SH	LU	
Scomi	OPTA-CARB	Acid-soluble calcium carbonate bridging agent	X	X	X	X	X	X	X	X		LO	FR	
Scomi	OPTA-CARB 5, 20, 50, 100	Custom-sized bridging material	X	X	X	X	X	X	X	X		RDF	FR	
Scomi	OPTA-LUBE CB	Lubricant for brine fluids										LU		
Scomi	OPTA-MUL	Emulsifier For NAF DIF - OPTA-VERT							X	X		E	FR	
Scomi	OPTA-PAC	FR for DIF and Formates	X				X	X	X			FR	RDF	
Scomi	OPTA-SAL M	Specially sized salt with anti caking properties used as bridging agent in RDF	X				X	X	X			LO	RDF	
Scomi	OPTA-SAL M	Specially sized salt used as bridging agent in RDF	X				X	X	X			LO	RDF	
Scomi	OPTA-SAL UL	One sack LCM for DIF	X				X	X	X			LO	RDF	
Scomi	OPTA-STAR	High purity non-fermenting starch for DIF	X				X	X	X			FR	RDF	
Scomi	OPTA-STAR PLUS	Proprietary starch for OPTA-FLO	X				X	X	X			FR	RDF	
Scomi	OPTA-VIS	DIF high quality viscosifier	X				X	X	X			V	RDF	
Scomi	OPTA-ZAN	Clarified xanthan	X	X			X	X	X			RDF		
Scomi	OPTA-ZYME S	Enzyme breaker for DIF												
Scomi	OX-SCAV	Liquid oxygen scavenger	X	X	X	X	X	X				CO		
Scomi	OX-SCAV CA	Oxygen scavenger for calcium brines										CO		
Scomi	OX-SCAV S	Powder oxygen scavenger	X	X	X	X	X	X				CO		
Scomi	RE-VERT	Emulsion prevention for completion fluids										CF		
Scomi	RHEO-PLEX	MMH	X									V		
Scomi	SCALE-HIB	LMW acrylic polymer for scale inhibition in WBM	X	X					X					LU
Scomi	SEA-GEL	API attapulgite	X	X								V		
Scomi	SS300	Solvent for us in OPTA-SOLVE breaker system								X	X			
Shrieve	BIO-ADD 1000	Pipe freeing agent	X	X	X	X	X	X				P		
Shrieve	BIO-ADD 1006	Spotting fluid for freeing stuck pipe	X	X					X			P		
Shrieve	BIO-ADD 1107	Solid sodium asphalt sulfonate filtrate reducer		X	X	X	X	X				FR	SH	
Shrieve	BIO-ADD 1200	Clay inhibitor-liquid KCl replacement		X	X	X						SH		
Shrieve	BIO-ADD 1239	Permanent clay stabilizer	X	X	X	X	X	X				SH		
Shrieve	BIO-ADD 1244	Shale Inhibitor		X	X	X						SH		
Shrieve	BIO-ADD 1325	Rheology Modifier -Flat	X	X				X		X		E		
Shrieve	BIO-ADD 1326	Rheology Modifier - Temporary	X	X					X			E		
Shrieve	BIO-ADD 1327	Rheology Modifier - Low end	X	X					X			E		
Shrieve	BIO-ADD 2000	Water insoluble corrosion inhibitor							X			CO		
Shrieve	BIO-ADD 2200	Water-dispersible corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 2300	Water-dispersible/alkaline stable brine corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 2400	Phosphated ester corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 2600	Water-dispersible corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 2700	Water-dispersible corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 2850	Amide concentrate-surfactant pourable for formulating as corrosion inhibitor	X	X	X	X	X	X				CO		
Shrieve	BIO-ADD 3100	Defoamer glycol-based	X	X	X	X	X	X				D		
Shrieve	BIO-ADD 3213	Highly effective wellbore cleaner							X	X		WBC		SU
Shrieve	BIO-ADD 3220	EP lubricant	X	X	X	X	X	X				LU		
Shrieve	BIO-ADD 3230	Lubricant/surfactant	X	X	X	X	X	X				LU	SU	
Shrieve	BIO-ADD 3500	Defoamer silicone-based	X	X	X	X	X	X				D		
Shrieve	BIO-ADD 378	Anti-Accretion ROP enhancer for WBM	X	X	X	X	X	X				SH	LU	

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Available from:	Product tradename	Description of material	Recommended for these systems						Product Function		
			Water-based fluids						Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated Polymer	Low solids	Saturated salt	Oil-based			
								Synthetic-based Air, mist, foam, gas			
Shrieve	BIO-ADD 4100	Amphoteric rheology modifier-general purpose	X	X	X	X	X		V		
Shrieve	BIO-ADD 4110	Rheology modifier	X	X	X	X	X	X	V	TE	
Shrieve	BIO-ADD 4130	Fatty acid derivatives low-end rheology modifier						X	V		
Shrieve	BIO-ADD 4145	Cationic rheology modifier						X	V		
Shrieve	BIO-ADD 4148	Rheology modifier - cationic						X	V		
Shrieve	BIO-ADD 4150	Rheology Modifier - High end	X	X				X	E		
Shrieve	BIO-ADD 4500	Medium charge, high MW, polyacrylamide emulsion			X	X	X		TH		
Shrieve	BIO-ADD 4510	Medium charge, medium MW, polyacrylamide emulsion			X	X	X		TH		
Shrieve	BIO-ADD 4520	Emulsion of partially hydrolyzed high MW polyacrylamide			X	X	X		TH		
Shrieve	BIO-ADD 5000	Secondary emulsifier						X	E	SU	
Shrieve	BIO-ADD 5001	High Temperature Secondary Emulsifier						X	E	SU	
Shrieve	BIO-ADD 5001	Secondary emulsifier - high temp (400F)	X	X		X		X	E	SB	
Shrieve	BIO-ADD 5004 NT	Secondary emulsifier non-toxic	X	X	X			X	E	SB	
Shrieve	BIO-ADD 5043	Secondary Emulsifier vegetable oil based in diesel	X	X		X		X	E		
Shrieve	BIO-ADD 5044	Secondary and oil wetting high temp (>450F) diesel based	X	X	X	X		X	E		
Shrieve	BIO-ADD 6000	Primary emulsifier						X	E	SU	
Shrieve	BIO-ADD 6001	High Temperature Primary Emulsifier						X	E	SU	
Shrieve	BIO-ADD 6030	Wetting agent / low cost primary emulsifier						X	E	SU	
Shrieve	BIO-ADD 6071	Primary/Secondary emulsifier for clay free	X	X	X	X		X	E	E	
Shrieve	BIO-ADD 6181	Primary/Secondary combo emulsifier for OBM	X	X	X	X		X	E		
Shrieve	BIO-ADD 6444	Multifunctional emulsifier for OBM	X	X	X	X		X	E		
Shrieve	BIO-ADD 6444P	Multifunctional emulsifier for OBM in a powder form	X	X	X	X		X	E		
Shrieve	BIO-ADD 702	Lubricant for brines, all density	X	X	X	X	X		LU		
Shrieve	BIO-ADD 706	Lubricant for land based drilling	X	X	X	X	X		LU		
Shrieve	BIO-ADD 706	Lubricant for water-based muds	X	X	X		X		LU		
Shrieve	BIO-ADD 706A	Lubricant for water-based muds	X	X	X	X	X		LU		
Shrieve	BIO-ADD 707	Lubricant for land based drilling	X	X	X	X	X		LU		
Shrieve	BIO-ADD 7200	High temperature filtration control agent			X	X	X		FR		
Shrieve	BIO-ADD 7300	Resinated lignin	X	X	X	X	X		TH	FL	
Shrieve	BIO-ADD 7301	Organo lignite for most base oils, diesel, paraffin and olefins to high 300F range						X	X	FL	
Shrieve	BIO-ADD 7302	Organo lignite fluid loss for all OBM to high 375°F range, Environmentally preferred						X	X	FL	
Shrieve	BIO-ADD 7303	Organo lignite fluid loss for diesel, paraffin and olefin based muds to high 375°F range						X	X	FL	
Shrieve	BIO-ADD 751	Extreme pressure lubricant	X	X	X	X			LU		FR
Shrieve	BIO-ADD 7550	Spotting fluid for freeing stuck pipe	X	X	X	X	X		X	P	
Shrieve	BIO-ADD 757	Lub for water-based muds and coil tubing	X	X	X	X			LU		
Shrieve	BIO-ADD 770	Lubricant for water-based muds			X	X			LU		
Shrieve	BIO-ADD 777	General purpose lubricant	X	X	X	X		X	LU		
Shrieve	BIO-ADD 8100	Micro-Emulsion	X	X	X				SU		
Shrieve	BIO-ADD 8200	Penetrating micro surfactant	X	X	X				SU		
Shrieve	BIO-ADD 8605	Well clean up/micellar surfactant						X	X	SU	
Shrieve	BIO-ADD 8605	Microemulsion Solvent for Acidizing		X	X		X		WBC		
Shrieve	BIO-ADD 910	Filtercake Carbonate Dissolver		X	X	X			WBC		
Shrieve	BIO-ADD 940	Drilling detergent for heavy gumbo	X	X	X	X	X	X	SU	FL	
Shrieve	BIO-ADD 947	Oil wetting agent	X	X	X				SU		
Shrieve	BIO-ADD 948	Well clean up spacer to displace WBM, OBM	X	X	X	X	X	X	SU		
Shrieve	BIO-BASE 100LF	Synthetic C15-18 Isomerized olefin-based fluid							X	SB	
Shrieve	BIO-BASE 168	Synthetic C16-18 Isomerized olefin-based fluid							X	SB	
Shrieve	BIO-BASE 200	Linear alpha olefin blend-based fluid, C1618 LAO							X	SB	
Shrieve	BIO-BASE 250	Linear alpha olefin blend-based fluid, C141618 LAO							X	SB	
Shrieve	BIO-BASE 260	C16 linear alpha olefin							X	SB	
Shrieve	BIO-BASE 300	Synthetic C11-13 paraffin, linear							X	SB	
Shrieve	BIO-BASE 365	Alkanes, Linear and Branched, light paraffins							X	SB	
Shrieve	BIO-BASE 410	Vegetable ester-based fluid							X	SB	
Shrieve	BIO-BASE 540	Synthetic 11-13 Linear and C8 - C26							X	SB	
Shrieve	BIO-BASE 550	Olefin-paraffin blend-based fluid for onshore applications						X	X	SB	
Shrieve	BIO-BASE 557	Linear olefin blend-based fluid, C141618LAO and C8 - C26							X	SB	
Shrieve	BIO-BASE 560	C11-14 paraffin-based fluid blend							X	SB	
Shrieve	BIO-BASE 625	C8 - C26 Distillates							X	SB	
Shrieve	BIO-COR 1002	Wetting Agent - Corrosion Inhibitor						X	CO		
Shrieve	BIO-COR 1011	High Temperature Acid Corrosion Inhibitor		X	X		X	X	CO		
Shrieve	BIO-COR 1014	Air Drilling Corrosion Inhibitor							X	CO	
Shrieve	BIO-COR 2300	Phosphate ester Corrosion Inhibitor	X	X	X	X	X	X	CO		
Shrieve	BIO-COR 2899	Corrosion Inhibitor	X	X	X	X	X	X	CO		
Shrieve	BIO-CROSS 101	Self Buffering Crosslinker			X		X		V		
Shrieve	BIO-VIS 100	Organo clay for base oil types, diesel, LTMO and SBM						X	X	V	
Shrieve	BIO-VIS 103	Organo clay for base oil types, diesel, LTMO and SBM						X	X	V	
Shrieve	BIO-VIS 105	Organo clay for base oil types, diesel, LTMO and SBM						X	X	V	
Shrieve	BIO-VIS 106	Organo clay for base oil types, diesel, LTMO and SBM						X	X	V	
Shrieve	Busan 1058	Biocide	X	X	X		X	X		B	

**A** = Alkalinity (pH control)  
**AC** = Anionic control  
**B** = Bactericides  
**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

**CO** = Corrosion inhibitors  
**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**DF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems							Product Function				
			Water-based fluids						Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt						
Shrieve	DRILL COL 699	Low-MW polypropylene glycol mixture	X	X	X	X	X	X			SH	LU		
Shrieve	DRILL COL 700	High-MW polypropylene glycol mixture	X	X	X	X	X	X			LU	SH		
Shrieve	DRILL-COL 240	Mid-cloud point glycol ether	X	X	X						SH	FR		
Shrieve	DRILL-COL 340	High-cloud point glycol ether	X	X	X	X	X				SH	FR		
Shrieve	DRILL-COL 705	Low cost glycol ether mixture	X	X	X	X	X	X			SH	FR		
Shrieve	KBAC 1020	Biocide	X	X	X		X	X			B			
Shrieve	MEGA-SURF 100	Wetting agent for WBM-cleaner for displacement from SBM to Brine	X	X	X	X	X	X	X	X	E	SU		
Shrieve	OMEGA 5150	Biocide	X	X	X	X	X	X			B			
Shrieve	SHRIEVE GUAR II	Various grades of guar for slurries, suspensions and fracturing												
Shrieve	SHRIEVE-CIDE 423	Highly effective non-aldehyde biocide	X	X	X	X	X	X			B			
Shrieve	SHRIEVE-CIDE 500	Highly effective non-aldehyde biocide	X	X	X	X	X	X			B			
Shrieve	SHRIEVE-CIDE 505	Highly effective non-aldehyde biocide	X	X	X	X	X	X			B			
Solazyme, Inc.	Encapso	Encapsulated lube/targeted friction inhibitor		X	X	X	X	X			LU	LO		
So. Clay	CLAYTONE 3	Economic organoclay, suspension aid/gellant							X	X	V			
So. Clay	CLAYTONE AF	Activator free organobentonite, viscosity and suspension control							X		V			
So. Clay	CLAYTONE ER	Superior high-yield organobentonite							X	X	V			
So. Clay	CLAYTONE II	Economy organo-bentonite viscosity, susp. Aid							X		V			
So. Clay	CLAYTONE IMG-400	High-yield organo bento-nite, viscosity aid							X		V			
So. Clay	CLAYTONE-EM	Rapid dispersing organo-clay gellant, susp. aid							X	X	V			
So. Clay	CLAYTONE SF	Superior high-yield organobentonite for synthetic fluids used in drilling fluids and track slurries							X	X	V			
So. Clay	Garamite 7303	High performance mixed mineral suspension aid for low polarity fluids							X	X	V			
So. Clay	Garamite 1958	High performance mixed mineral suspension aid for medium polarity fluids							X	X	V			
So. Clay	Garamite 7305	High performance mixed mineral suspension aid for medium polarity fluids							X	X	V		MLCM	
So. Clay	Laponite RD	High performance synthetic suspension aid for water-based systems	X	X	X	X	X	X	X	X	V	FR	MLCM	
Strata	FOAM-BLAST		X	X	X	X	X	X			D			
Strata	FRAC-ATTACK	PKG lost circulation pill-on-a-pallet mixed in drill water	X	X	X	X	X	X	X	X	MLCM		MLCM	
Strata	STRATA-FLEX - F&M	Elastomeric sealant	X	X	X	X	X	X	X		LO	FR	FR	
Strata	STRATA-LCM	Medium Gr. blend of cellulose fibers	X	X	X	X	X	X	X		LO	FR		
Strata	STRATA-LUBE	Liquid lubricant for drilling and sliding	X	X	X	X	X	X			LU		LU	
Strata	STRATA-SCM	Fine grade blend of cellulose fibers	X	X	X	X	X	X	X	LO	FR			
Strata	STRATA-TROL	Prepacked gilsonite and select resins	X	X	X	X	X	X	X		HPHT	SH		
Strata	STRATA-VANGUARD	PKG lost circulation pill-on-a-pallet mixed in drilling mud	X	X	X	X	X	X	X	X	MLCM			
Sun	BLACKNITE	Multi-particle well bore strengthener	X	X	X	X	X	X	X	X	SH	FR		
Sun	C-MUL	PAO-ROP enhancer	X	X	X	X	X	X			LU	SH	LU	
Sun	COASTAL SPOT	PAO environmentally safe spotting fluid	X	X	X	X	X	X			P	LU	SH	
Sun	COASTALUBE	PAO-based LU/ROP enhancer	X	X	X	X	X	X			LU	SH		
Sun	DRILLCON-D	Liquid shale inhibitor	X	X	X	X	X	X			SH			
Sun	EK-2000	Degreaser	X	X	X	X	X	X	X	X				
Sun	EZESLIDE	Lubricant/friction reducer	X	X	X	X	X	X			X	LU		
Sun	FOAMBUSTER	Defoamer	X	X	X	X	X	X			D	SU		
Sun	LIQUIBEADS	Liquid mechanical LU	X	X	X	X	X	X			X	LU		
Sun	LUBRA-GLIDE	Copolymer bead-solid LU	X	X	X	X	X	X	X	X	X	LU		
Sun	LUBRAMAX	Nanocomposite HT/HP Bead - solid LU	X	X	X	X	X	X	X	X	X	LU	FR	
Sun	SX-PLUS	Carbon seepage loss agent	X	X	X	X	X	X	X	X	LO	FR		
TBC	ANTI-FOAM HD	Defoaming agent		X	X	X	X	X			D			
TBC	AO-ACTIVATOR	Viscosifier							X		SU			
TBC	AO-EPC	Clay							X		V			
TBC	AO-EW	Emulsifier							X		SU	TH		
TBC	AO-FLA-L	Organo lignite suspension							X		FR	TH		
TBC	AO-FLA-LC	Copolymer/organo lignite suspension							X		FR	TH		
TBC	AO-SYSTEM	Oil-based mud system, all-oil fluid							X		OBM			
TBC	BORECLEAN	High molecular weight glycol	X		X	X					SH	WBC	SU	
TBC	BREAKE C	Calcium peroxide	X	X	X	X	X				WBC	SU	LO	
TBC	BRIDGECARB-ULTRA	Polymer and sized calcium carbonate blend	X	X	X	X					LO	FR		
TBC	BRIDGECARB-ULTRA FINE	Polymer and sized calcium carbonate blend	X	X	X	X					LO	FR		
TBC	BRIDGESAL-ULTRA	Polymer and sized salt blend	X	X	X	X	X				LO	FR		
TBC	BRIDGESAL-ULTRA SF	Polymer and sized salt blend	X	X	X	X	X				LO	FR		
TBC	CIB	Corrosion inhibitor	X	X	X	X	X				CO			
TBC	CL FREE	Organic amine	X	X	X	X	X				SH			
TBC	DEFOAM 2	Defoaming agent	X	X	X	X	X				D			
TBC	FL-7 PLUS	Derivatized starch	X	X	X	X	X				FR	F		
TBC	FL-7 PLUS L	Derivatized starch suspension	X	X	X	X	X				FR			
TBC	FORMATE STABILIZER	Low molecular weight polyglycol	X	X	X	X	X				TE			
TBC	FORMATROL	Derivatized starch	X	X	X	X	X				FR	V		
TBC	FORMAVIS ULTRA	Xanthan gum biopolymer	X	X	X	X	X				V			
TBC	FRACSAL FR-143	Cationic, high molecular weight poly-acrylamide	X		X	X					SU			
TBC	FRACSAL I	Borate salt crosslinking suspension	X		X	X					CF			
TBC	FRACSAL II	Borate salt crosslinking suspension	X		X	X					CF			
TBC	FRACSAL III	Borate salt crosslinking suspension	X		X	X					CF			
TBC	FRACSAL NE-136	Nonionic, ethoxylated polyglycol blend	X	X							SU			
TBC	FRACSAL NE-137	Nonionic, ethoxylated polyglycol blend	X	X							SU			
TBC	FRACSAL ULTRA	Borate salt crosslinking suspension	X		X	X					CF			
TBC	FRACSAL WATERBASE	Borate salt crosslinking suspension	X		X	X					CF			
TBC	GLYSOL	Derivatized starch	X	X	X	X					FR	V		

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Available from:	Product tradename	Description of material	Recommended for these systems					Product Function		
			Water-based fluids					Primary	Secondary	Secondary
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based
									Air, mist, foam, gas	
TBC	GLYSOL SF 400M	High molecular weight polyethylene glycol	X	X	X	X	X		TE	V
TBC	HYSAI C	Blend of polymers, buffers and CaCO <sub>3</sub>	X	X	X	X			LO	FR
TBC	HYSAI HD	Polymer and sized salt blend for high density brines	X	X	X	X	X		LO	FR
TBC	HYSAI HT	Blend of polymers, buffers and sodium chloride for high temp. and densities	X	X	X	X	X		LO	FR
TBC	HYSAI SUPERFINE	Polymer and sized salt blend for high density brines	X	X	X	X	X		LO	FR
TBC	INHIBISAL ULTRA B	Low molecular weight polyglycol	X	X	X	X	X		SH	L
TBC	INHIBISAL ULTRA SI-141	Alkyleneopolyamine phosphonic acid-based scale inhibitor							TE	
TBC	LUBETEX	Lubricant	X		X	X	X		L	
TBC	OSS PILL	Polymer and oil soluble resin blend	X	X	X	X			LO	FR
TBC	OSS PILL ULTRA	Polymer and oil soluble resin blend	X	X	X	X			LO	FR
TBC	PBS PLUG 2000	Polymer and inorganic salt blend	X	X	X	X			MLCM	
TBC	PBS PLUG 500	Polymer and inorganic salt blend	X	X	X	X			MLCM	
TBC	PBS PLUG ACTIVATOR	Inorganic salt blend	X	X	X	X			MLCM	
TBC	PBS PLUG RETARDER	Inorganic salt blend	X	X	X	X			MLCM	
TBC	PLUG-SAL	Sized sodium chloride	X	X	X	X	X		LO	W
TBC	PLUG-SAL X	Sized sodium chloride	X	X	X	X	X		LO	W
TBC	POLYTEX AHT	Organic polymer	X	X	X	X	X		FR	V
TBC	POLYTEX AHT-L	Organic polymer suspension	X	X	X	X	X		FR	V
TBC	SANIHEAL PILL	Polymer/carbonate blend	X	X	X	X			LO	W
TBC	SLUGGIT	Coarse calcium carbonate	X	X	X	X			LO	W
TBC	SLUGGIT CM	Coarse calcium carbonate	X	X	X	X			LO	W
TBC	SLUGGIT PLUS	Coarse calcium carbonate	X	X	X	X			LO	W
TBC	SOLUBRIDGE	Oil-soluble bridging agent	X	X	X	X			LO	W
TBC	SOLUBRIDGE COARSE	Sized oil soluble resin	X	X	X	X			LO	W
TBC	SOLUBRIDGE FINE	Sized oil soluble resin	X	X	X	X			LO	W
TBC	SOLUBRIDGE MID	Sized oil soluble resin	X	X	X	X			LO	FR
TBC	SOLUVIS	Oil-soluble polymer and organic salt blend	X	X	X	X			LO	FR
TBC	THIXQUIK-L	HEC suspension	X	X	X	X			V	
TBC	THIXSAL-ULTRA	Biopolymer derivatized starch blend	X	X	X	X			FR	V
TBC	THIXSAL-ULTRA SYSTEM	Drill-in fluid, sized sodium chloride	X	X	X	X			RDF	
TBC	ULTRA BREAKE M	Magesium peroxide	X	X	X	X	X		WBC	SU
TBC	ULTRA PF SYSTEM	Drill-in fluid - high temp. sized calcium carbonate	X	X	X	X	X		RDF	
TBC	ULTRACARB 12	Sized calcium carbonate	X	X	X	X			LO	W
TBC	ULTRACARB 2	Sized calcium carbonate	X	X	X	X			LO	W
TBC	ULTRACARB 20	Sized calcium carbonate	X	X	X	X			LO	W
TBC	ULTRACARB 30	Sized calcium carbonate	X	X	X	X			LO	W
TBC	ULTRACARB 5	Sized calcium carbonate	X	X	X	X			LO	W
TBC	ULTRACARB SYSTEM	Drill-in fluid, sized calcium carbonate	X	X	X	X			RDF	
TBC	ULTRASAL 10	Sized sodium chloride	X	X	X	X			LO	W
TBC	ULTRASAL 20	Sized sodium chloride	X	X	X	X			LO	W
TBC	ULTRASAL 30	Sized sodium chloride	X	X	X	X			LO	W
TBC	ULTRASAL 5	Sized sodium chloride	X	X	X	X			LO	W
TBC	VIS ULTRA	Xanthan gum biopolymer	X	X	X	X			V	FR
TBC	VIS ULTRA-L	Xanthan gum biopolymer suspension	X	X	X	X			V	FR
Tetra	ACETIC ACID	pH control							A	LO
Tetra	ACTIVIS	Liquid HEC, environ. friendly	X	X	X	X	X		V	FR
Tetra	BIOCIDE	Bactericide	X	X	X	X	X		B	CO
Tetra	BIOPOL L	Select, readily-dispersible biopolymer	X	X	X	X	X		V	FR
Tetra	BIOPOL L	Liquid, dispersible biopolymer	X	X	X	X	X		V	FR
Tetra	BIORID 20L	Bactericide			X	X	X		B	CO
Tetra	BIORID B-102	Bactericide			X	X	X		B	CO
Tetra	BIORID B-71	Bactericide			X	X	X		B	CO
Tetra	BIORID P-15	Bactericide			X	X	X		B	CO
Tetra	BUFF-10	pH control	X		X	X	X		A	
Tetra	BUFF-6	pH control	X		X	X	X		A	
Tetra	CABR2	Anhydrous calcium bromide					X		CF	W
Tetra	CALCIUM FREE BRINE	Calcium-free brine solution					X		CF	W
Tetra	CAPHIB WELLHEAD TREATMENT PACKAGE	Corrosion inhibitor system							CO	
Tetra	CAUSTIC POTASH	pH control			X	X	X		A	
Tetra	CAUSTIC SODA	pH control			X	X	X		A	
Tetra	CHLORIDE FREE BRINE	Chloride-free brine solution					X		CF	W
Tetra	CITRIC ACID	Citric acid					X		A	
Tetra	CORSAF 16D	Corrosion inhibitor				X			CO	CO
Tetra	CORSAF CR-D	Thiocyanate-free inhibitor				X			CO	CO
Tetra	CORSAF CR-I	Thiocyanate-free inhibitor				X			CO	CO
Tetra	CORSAF NS	Corrosion inhibitor				X			CO	CO
Tetra	CORSAF SF	Thiocyanate-free inhibitor				X			CO	CO
Tetra	CORSAF ZHD	Corrosion inhibitor				X			CO	CO
Tetra	CSCOOH SOLUTION	Cesium formate solution				X			CF	W
Tetra	CS-KCOOH SOLUTION	Cesium/potassium formate solution				X			CF	W
Tetra	CT 200 FR	Friction reducer				X			LU	SU
Tetra	CT FOAM	Foaming agent				X			FO	SU
Tetra	EGMBE	Mutual solvent				X			TH	
Tetra	FERROBAN	Iron control agent				X			CO	A
Tetra	HYDROCHLORIC ACID	pH control				X			A	
Tetra	HYDROGEN PEROXIDE	Oxidizer							BR	
Tetra	IR-1000	Iron control agent				X			CO	
Tetra	KCL	Potassium chloride			X	X	X		CF	W
Tetra	KCOOH	Anhydrous potassium formate				X			CF	W
Tetra	KCOOH SOLUTION	Potassium formate solution				X			CF	W

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**BR** = Breakers  
**CA** = Calcium removers  
**CF** = Completion fluid

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**D** = Defoamers  
**E** = Emulsifiers  
**FR** = Filtrate reducers  
**FL** = Flocculants  
**FO** = Foaming agents

**HPHT** = High pressure/high temperature  
**HPWB** = High performance, water-based  
**HS** = Hydrate suppressant  
**LO** = Lost circulation additives  
**LU** = Lubricants  
**MLCM** = Massive lost circulation material

**P** = Pipe-freeing agents  
**RDF** = Drill-in fluid  
**SB** = Synthetic-based  
**SH** = Shale-control agents  
**SU** = Surface-active agents  
**T** = Tracers

**TE** = Temperature stability agents  
**TH** = Thinner, dispersants  
**V** = Viscosifiers  
**W** = Weighting materials  
**WBC** = Wellbore cleanout  
**WBM** = Water-based mud

Available from:	Product tradename	Description of material	Recommended for these systems							Product Function			
			Water-based fluids							Primary	Secondary	Secondary	
			Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based				
									Synthetic-based	Air, mist, foam, gas			
Tetra	LIME	pH control						X			A		
Tetra	MAGNESIUM OXIDE	High-purity alkaline earth oxide						X			A		
Tetra	METHANOL	Hydrate suppressant						X			HS		
Tetra	MGCL2	Anhydrous magnesium chloride						X			W		
Tetra	MONO ETHYLENE GLYCOL	Hydrate suppressant						X			HS		
Tetra	NABR	Anhydrous sodium bromide						X			CF	W	
Tetra	NaCl	Anhydrous sodium chloride						X			CF	W	
Tetra	NACOOH	Anhydrous sodium formate						X			CF	W	
Tetra	NACOOH SOLUTION	Sodium formate solution						X			CF	W	
Tetra	NA-KCOOH SOLUTION	Sodium/potassium formate solution						X			CF	W	
Tetra	NA-ZN BRINE SOLUTION	Sodium zinc bromide solution						X			CF	W	
Tetra	NH4CL	Ammonium chloride						X			CF	W	
Tetra	OXBAN	Oxygen scavenger non-calcium-based brines						X			CO		
Tetra	OXBAN HB	Oxygen scavenger calcium-based brines						X			CO		
Tetra	PAYZONE 750	Temp. stabilizer						X			TE		
Tetra	PAYZONE CLEANSEAL	Fluid loss control						X			LO	FR	FR
Tetra	PAYZONE CMT-X	Magnesium chloride treatment for cement contamination	X		X	X	X	X			CA	A	
Tetra	PAYZONE DF-CC	Brine-based drill-in fluid with calcium carbonate						X			RDF	LO	
Tetra	PAYZONE DF-SS	Saturated NaCl brine-based drill-in fluid with sized salt						X			RDF	LO	
Tetra	PAYZONE FLUIDS	CBF-based drilling fluid						X			RDF	LO	
Tetra	PAYZONE HPS	Chemically-modified high-performance starch	X	X	X	X	X	X			FR	LO	
Tetra	PAYZONE NE 200	Emulsion preventor						X			SU		
Tetra	PAYZONE NE 300	Emulsion preventor						X			SU		
Tetra	PAYZONE SI 139	Scale inhibitor						X			CA		
Tetra	PAYZONE SI 250	Scale inhibitor						X			CA		
Tetra	PAYZONE STAY CLAY	Clay stabilizer						X			SH		LO
Tetra	PAYZONE STRATAGLIDE	Lubricant						X			LU		LO
Tetra	PROPYLENE GLYCOL	Hydrate suppressant						X			HS		LO
Tetra	PSEUDOPOL	Synthetic polymer	X	X	X	X	X	X			V	FR	
Tetra	PSEUDOPOL D	Synthetic polymer	X	X	X	X	X	X			V	FR	
Tetra	PSEUDOPOL HT	Synthetic polymer high temp.	X	X	X	X	X	X			V	FR	
Tetra	PSEUDOPOL HT LIQUID	Synthetic polymer high temp.	X	X	X	X	X	X			V	FR	
Tetra	SODA ASH	pH control						X			A		
Tetra	TDSP I	Weighted spacer						X			WBC		
Tetra	TDSP II	Surfactant wash	X	X	X	X	X	X			WBC	SU	
Tetra	TDSP II OMD	Surfactant wash						X	X		WBC	SU	
Tetra	TDSP II O-SOL	Surfactant wash	X	X	X	X	X	X	X	X	WBC	SU	
Tetra	TDSP II O-SOL PLUS	Surfactant wash	X	X	X	X	X	X	X	X	WBC	SU	
Tetra	TDSP III	Spacer-viscous sweep						X			WBC	LO	
Tetra	TETRA 11.6	38% calcium chloride solution						X	X		CF	W	
Tetra	TETRA 12.4	Sodium bromide solution						X			CF	W	
Tetra	TETRA 14.2	53% calcium bromide solution						X			CF	W	
Tetra	TETRA 19.2	Calcium bromide zinc bromide solution						X			CF	W	
Tetra	TETRA 20.5	High-density zinc/calcium bromide solution						X			CF	W	
Tetra	TETRA CO2X	Carbon dioxide scavenger						X					
Tetra	TETRA DEFOAM HB	Defoamer						X			D		
Tetra	TETRA DIRT MAGNET	Flocculant						X			FL	WBC	FR
Tetra	TETRA EXPRESS	Premium Gr. calcium chloride anhydrous						X	X		CF	W	FR
Tetra	TETRA H2S SCAVENGER T	Hydrogen sulfide scavenger						X					
Tetra	TETRA H2S SCAVENGER ZF	Hydrogen sulfide scavenger						X					
Tetra	TETRA MAGMAFIBER FINE	Fine-Gr., acid-soluble, fibrous LCM	X	X	X	X	X	X			MLCM	LO	
Tetra	TETRA MAGMAFIBER REGULAR	Medium-Gr., acid-soluble, fibrous LCM	X	X	X	X	X	X			MLCM	LO	
Tetra	TETRA OMD	Oil mud detergent						X	X		WBC	SU	V
Tetra	TETRA O-SOL	Wellbore cleanup chemical surfactant	X	X	X	X	X	X	X	X	WBC	SU	FR
Tetra	TETRA PREFLUSH	WBM prewash sweep	X	X	X	X	X	X			WBC	SU	FR
Tetra	TETRA SMARTSEAL	Fluid loss control						X			LO	FR	FR
Tetra	TETRA SMARTSEAL PAD	Fluid loss control						X			LO	FR	FR
Tetra	TETRA SS COARSE	Selected PSD-range blend of ground NaCl, 1,000–10,000 microns					X	X			LO	W	FR
Tetra	TETRA SS FINE	Selected fine grind NaCl, 1–800 microns					X	X			LO	W	
Tetra	TETRA SS MEDIUM	Selected PSD range blend of ground NaCl, 100–1,500 microns					X	X			LO	W	
Tetra	TETRA SS PRIME	Fine-grind, broad PSD range NaCl, 95% < 74 microns	X	X	X	X	X	X			LO	W	FR
Tetra	TETRA SS ULTRA	Ultra-fine grind, narrow PSD range NaCl, 95% < 44 microns	X	X	X	X	X	X			LO	W	FR
Tetra	TETRA TEMPERATURE EXTENDER	Thermal stabilizer for polymers					X	X			TE		FR
Tetra	TETRABAN N 501	Corrosion inhibitor						X			CO		FR
Tetra	TETRACARB	Acid-soluble bridging agents	X	X	X	X	X	X	X	X	LO	W	FR
Tetra	TETRACARB COARSE	Highly acid-soluble, coarse grind CaCO3 blend, 1,000–3,500 microns	X	X	X	X	X	X	X	X	LO	W	FR
Tetra	TETRACARB FINE	Highly acid-soluble, select grind CaCO3, 10–500 microns	X	X	X	X	X	X	X	X	LO	W	FR
Tetra	TETRACARB FLAKE	Flaked calcium carbonate	X	X	X	X	X	X	X	X	MLCM	LO	
Tetra	TETRACARB MEDIUM	Highly acid-soluble, select grind CaCO3, 85–1,200 microns	X	X	X	X	X	X	X	X	LO	W	
Tetra	TETRACARB PRIME	Highly acid-soluble, coarse grind CaCO3 blend, 2–150 microns	X	X	X	X	X	X	X	X	LO	W	
Tetra	TETRACARB ULTRA	Ultra-fine grind, narrow PSD range CaCO3, 95% < 15 microns	X	X	X	X	X	X	X	X	LO	W	
Tetra	TETRACIDE D	Broad spectrum biocide	X	X	X	X	X	X			B	CO	
Tetra	TETRA CLEAN 103	Flocculant						X			FL	WBC	SU
Tetra	TETRA CLEAN 105	Surfactant wash	X	X	X	X	X	X	X	X	WBC	SU	
Tetra	TETRA CLEAN 106	Wellbore cleanup surfactant extender	X	X	X	X	X	X	X	X	WBC		
Tetra	TETRA CLEAN 107	Surfactant wash	X	X	X	X	X	X	X	X	WBC	SU	FR
Tetra	TETRA CLEAN 109	Surfactant wash	X	X	X	X	X	X			WBC	SU	FR



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Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic	Air, m	Primary	Secondary	Secondary
Tetra	TETRA CLEAN 110	Surfactant wash	X	X	X	X	X	X				WBC	SU	
Tetra	TETRA COR NA	Corrosion inhibitor				X	X					CO		
Tetra	TETRA FLEX 110 POLYMER	Gelled polymer						X				MLCM	LO	
Tetra	TETRA FLEX 135 POLYMER	Gelled polymer						X				MLCM	LO	
Tetra	TETRA FLEX CATALYST	Catalyst						X				LO		
Tetra	TETRA FLEX PH STAY	pH Buffer						X				A	TE	
Tetra	TETRA GLIDE CT	Lubricant						X				LU		
Tetra	TETRA HIB	Corrosion inhibitor						X				CO		
Tetra	TETRA HIB PLUS	Corrosion inhibitor						X				CO		LO
Tetra	TETRA SOL	Solvent						X	X	X		WBC		
Tetra	TETRA SOL PDR	Pipe dope remover										WBC		
Tetra	TETRA SOL PDR PLUS	Pipe dope remover										WBC		LO
Tetra	TETRA VIS	HEC polymer, dry	X	X	X	X	X	X				V	FR	LO
Tetra	TETRA VIS BREAKER	Viscosity breaker						X				BR		
Tetra	TETRA VIS EXTENDER	Temp. extender						X				TE		
Tetra	TETRA VIS L PLUS	Liquid HEC, double strength	X	X	X	X	X	X				V	FR	
Tetra	TETRA VIS-L	HEC polymer, liquid	X	X	X	X	X	X				V	FR	
Tetra	TETRA-XCD	Dry biopolymer	X	X	X	X	X	X				V	FR	
Tetra	TETRAZYME S1	Filter cake breaker						X				BR		
Tetra	TETRAZYME X1	Filter cake breaker						X				BR		
Tetra	THERMAFIX	Insulating packer fluid						X				HPHT		
Tetra	ZNBR2 PURE SOLUTION	Pure zinc bromide solution						X				CF	W	
Tolsa	BERKBENT DM	Fresh water drilling bentonite	X	X	X	X	X					V	FR	
Tolsa	BERKBENT GDM	Wyoming bentonite	X	X	X	X	X	X				V	FR	
Tolsa	PANGEL B10	Organosepiolite							X	X		V		
Tolsa	PANGEL B20	Organosepiolite							X	X		V		
Tolsa	PANGEL B5	Organosepiolite							X	X		V		SH
Tolsa	PANGEL FP	Sepiolite clay rheological additive	X	X	X	X	X	X				V	TE	FR
Tolsa	SMECTAGEL SWC	Attapulgite salt water clay	X	X	X	X	X	X				V		TE
Turbo-Chem	E Z SQUEEZE	High solids, high fluid loss LCM squeeze	X	X	X	X	X	X	X	X		LO		HPHT
Turbo-Chem	PREMIUM SEAL (REG, FINE)	Cellulose fiber sealant	X	X	X	X	X	X	X	X		LO	FR	TE
Turbo-Chem	SWEL LCM	Gelled, swelling/sealing agent, LCM	X	X	X	X	X	X	X	X		LO	V	TE
Turbo-Chem	SYN-SEAL	Cellulose fiber resin blend sealant	X	X	X	X	X	X	X	X		LO	FR	SH
Turbo-Chem	TURBO-PHALT	Coupled gilsonite/resin blend	X	X	X	X	X	X	X	X		SH	FR	HTHP
Turbo-Chem	FIRST RESPONSE	Single sack particulate blend	X	X	X	X	X	X	X	X		LO	LO	
Venture	VEN-ALK	Cauticized lignite			X	X	X	X				TH	FR	
Venture	VEN-BHC (BOREHOLE-CONTROL)	Poly Hydroxy silicate, rheology modifier	X			X						V	RDF	
Venture	VEN-BLOCK	Polymer LCM system	X	X	X	X	X	X	X	X	X	MLCM	LO	
Venture	VEN-BREAK 12	Defoamer	X	X	X	X	X	X				D	E	
Venture	VEN-BREAK 108	Enzyme breaker for VEN-BLOCK system	X	X	X	X	X	X	X	X		BR		
Venture	VEN-CHEM 208	Oil-based fluid loss additive							X	X		FR	TH	
Venture	VEN-CHEM 215	Oil-based fluid loss additive							X	X		FR	TH	
Venture	VEN-CHEM 222	Oil-based fluid loss additive							X	X		FR	TH	
Venture	VEN-DELTA P	Micronized fiber	X	X	X	X	X	X				LO		
Venture	VEN-DET I	Water mud detergent	X	X	X	X	X	X				SU		
Venture	VEN-DET II	Oil mud detergent							X			SU		
Venture	VEN-FLOC	Natural flocculant	X	X	X	X	X	X				FL		
Venture	VEN-FREE I	Liquid nonaqueous spotting fluid concentrate	X	X	X	X	X	X	X	X		P	LU	
Venture	VEN-FREE II	Liquid nonaqueous spotting fluid additive	X	X	X	X	X	X	X	X		P	LU	
Venture	VEN-FREE III	Solid stuck pipe additive	X	X	X	X	X	X				P	LU	
Venture	VEN-Fyber 201	Cellulose fiber/oil mud seepage loss							X	X		LO		
Venture	VEN-FYBER SEAL COARSE	Micronized cellulose fibers, LCM	X	X	X	X	X	X				LO		SH
Venture	VEN-FYBER SEAL FINE	Micronized cellulose fibers, seepage loss/LCM	X	X	X	X	X	X	X	X		LO		TH
Venture	VEN-GEL 413	Organoclay							X	X		V	E	
Venture	VEN-GEL 420	Organoclay suspension additive							X	X		V	E	
Venture	VEN-K	Potassium lignite	X	X	X	X	X					FR	E	
Venture	VEN-LIG	Oxidized lignite	X	X	X	X	X					FR	E	
Venture	VEN-LUBE I	Pollution-FREE liquid lubricant	X	X	X	X	X	X				LU	SH	
Venture	VEN-LUBE II	Solid Lubricant	X	X	X	X	X	X				LU	SH	
Venture	VEN-MUL 906	Relaxed oil mud emulsifier							X	X		E	FR	
Venture	VEN-MUL 907	Oil mud wetting agent							X	X		E	FR	
Venture	VEN-MUL 912	Basic oil mud emulsifier							X	X		E	FR	
Venture	VEN-MUL 930	Oil mud low end rheological modifier							X	X		E	FR	
Venture	VEN-PAK	Blend of organic fibers	X	X	X	X	X	X				LO		
Venture	VEN-PEL	Expandable, fibrous LCM	X	X	X	X	X	X				LO		
Venture	VEN-PLEX I	Liquid complexer	X	X	X	X	X	X				LO	A	
Venture	VEN-PLEX II	Solid complexer	X	X	X	X	X	X				LO	A	
Venture	VEN-PLUG	Polymer LCM	X	X	X	X	X	X				FR		
Venture	VEN-REZ II	Derivatized lignite				X	X	X				LO	TH	SH
Venture	VEN-SEAL 700	Polymer LCM	X	X	X	X	X	X				MLCM		SH
Venture	VEN-SQUEEZE	High solids, high fluid loss LCM squeeze	X	X	X	X	X	X	X			MLCM	LO	
Venture	VEN-TROL 401	Shale-control/fluid Loss additive	X	X	X	X	X	X				SH	LU	
Venture	VEN-VIS 501	Liquid polymer viscosifier	X	X	X	X	X	X				V	FR	
Venture	VEN-VIS 503	Liquid polymer viscosifier	X	X	X	X	X	X				V	FR	
Vertechs	VCLEAN	OBM/crude oil residue cleanup agent						X				WBC	CF	SU
Vertechs	ULIA	Non/low invasion seal agent	X	X	X	X	X	X	X	X	X	LO		
ViChem	MHA	Hybrid EBM/WBM		X	X	X	X	X						
ViChem	Maxim-100	Water-based mud system	X				X	X						
ViChem	EBM	Oil-based mud system							X					
Weatherford	GLUTARALDEHYDE	Glutaraldehyde biocide	X	X	X	X	X	X			X	B		
Weatherford	GUAR GUM	Guar gum	X	X	X	X	X	X				V		

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Weatherford	HEC	Hydroxyethyl cellulose				X					V		
Weatherford	ISOTHAZOLIN	Isotiazolin biocide	X	X	X	X	X	X		X	B		
Weatherford	KLEEN FLOC	Displacement surfactant / solvent for use with oil/synthetic muds							X	X	WBC		
Weatherford	KLEEN RINSE	Blend of ionic and non-ionic surfactants, flocculants and high-flash-point solvents							X	X	WBC		
Weatherford	KLEEN SOLV	Blend of surfactants and solvents designed to suspend solids							X	X	WBC		
Weatherford	PLIOLITE	Fluid Loss and suspension control for NAF HPHT Systems						X	X		FR	HPHT	
Weatherford	SODIUM SILICATE	Sodium silicate liquor	X				X	X	X		SH		
Weatherford	WEL-OX CA	Oxygen scavenger for calcium brines	X	X	X	X	X	X			CO		
Weatherford	WEL-BAR	API 4.2 barite	X	X	X	X	X	X	X	X	W		
Weatherford	WEL-BAR 4.1	API 4.1 Barite	X	X	X	X	X	X	X	X	W		
Weatherford	WEL-BAR FG	Fine grind barite	X	X	X	X	X	X	X	X	W		HPWB
Weatherford	WEL-BLEND	Blend of fibrous and granular materials for lost circulation	X	X	X	X	X	X	X	X			
Weatherford	WEL-BREAK E	Enzyme breaker for RDF									RDF		
Weatherford	WEL-CAP	PHPA polymer HMW	X		X	X	X	X			SH		RDF
Weatherford	WEL-CAP C	Cationic Encapsulator	X	X		X	X	X		X	SH		HPWB
Weatherford	WEL-CAP D	Readily dispersible — HMW PHPA	X		X	X	X	X			SH		FR
Weatherford	WEL-CAP L	Liquid, high molecular weight, PHPA polymer	X		X	X	X	X			SH		FR
Weatherford	WEL-CARB	Acid-soluble calcium carbonate bridging agent	X	X	X	X	X	X	X	X	LO	FR	FR
Weatherford	WEL-COAT	Water-dispersible filming amine				X	X	X		X	CO		
Weatherford	WEL-COL A	Low-Cloud point glycol for shale control	X		X	X	X				SH		LU
Weatherford	WEL-COL B	Medium cloud point glycol	X		X	X	X				SH		LU
Weatherford	WEL-COL C	Cloud point glycol for high salt systems						X			SH		LU
Weatherford	WEL-CON FR	TH for flat rheology system							X	X	TH		
Weatherford	WEL-CON T	TH for NAF systems						X	X		TH		
Weatherford	WEL-CON TWA	Oil-wetting agent							X	X	TH		
Weatherford	WEL-CORR	Potassium salt of a glycol phosphate ester	X	X	X	X	X	X			CO		
Weatherford	WEL-DEFOAM A	Alcohol-based defoamer	X	X	X	X	X	X			D		
Weatherford	WEL-DEFOAM G	Glycol-based defoamer	X	X	X	X	X	X			D		
Weatherford	WEL-DEFOAM LT	Low-toxicity defoamer	X	X	X	X	X	X			D		HPWB
Weatherford	WEL-DEFOAM S	Silicone-based defoamer	X	X	X	X	X	X			D		
Weatherford	WEL-DET MD	Mud detergent	X	X	X	X	X	X			SU		
Weatherford	WEL-DENSE	API Hematite	X	X	X	X	X	X	X	X	W		
Weatherford	WEL-DMS	Surfactant for WBM	X	X	X	X	X	X			SU		
Weatherford	WEL-DRL ROP	ROP Enhancer	X	X	X	X	X	X			SU		LU
Weatherford	WEL-EX	Bentonite extender	X		X	X	X				V	FL	
Weatherford	WEL-FIBER	Seepage loss control	X	X	X	X	X	X			LO		
Weatherford	WEL-FILM	Amine-based corrosion inhibitor	X	X	X	X	X	X			CO		
Weatherford	WEL-GARD 3	3-in-1 corrosion inhibitor						X	X		CO		
Weatherford	WEL-GARD PH	pH buffer and polymer extender	X	X							CO		HPWB
Weatherford	WEL-GEL	API bentonite	X	X	X	X	X	X		X	V	FR	HPWB
Weatherford	WEL-GEL NT	API non-treated Wyoming bentonite	X	X	X	X	X	X		X	V	FR	HPWB
Weatherford	WEL-GEL SW	API Grade Attapulgite	X	X				X			V		
Weatherford	WEL-HIB 40	Cationic Shale inhibitor	X	X	X	X	X				SH		
Weatherford	WEL-HIB A	Polyamine-based inhibitor for HPWB	X	X	X	X	X	X			SH		
Weatherford	WEL-HIB C	Encapsulating polymer for HPWB	X	X	X	X	X				SH		
Weatherford	WEL-LIG	Lignite	X	X	X			X			FR	TH	
Weatherford	WEL-LIG C	Lignite - causticised	X	X	X	X	X				FR	TH	
Weatherford	WEL-LIG K	Potassium Lignite		X	X	X		X			TH	FR	
Weatherford	WEL-LIG NAF	Leonardite						X	X		FR		
Weatherford	WEL-LUBE CF	Lubricant for brine fluids	X				X				LU		HPWB
Weatherford	WEL-LUBE E	Ester-based lubricant	X	X		X	X				LU		
Weatherford	WEL-LUBE NAF	NAF Ester-based lubricant						X	X		FR		
Weatherford	WEL-LUBE S	WBM lubricant for silicate muds				X	X				LU		
Weatherford	WEL-LUBE ULTRA	High performance WBM Lubricant	X	X		X	X	X			LU		
Weatherford	WEL-MOD	Viscosifier for OBM							X	X			
Weatherford	WEL-MOD FR	Flat rheology modifier for deepwater system							X	X	V		
Weatherford	WEL-MOD LE	Viscosifier for OBM							X	X	V		
Weatherford	WEL-MOD SA	Low temp. rheology							X	X	V	E	
Weatherford	WEL-MUL	Primary emulsifier							X	X	E	FR	
Weatherford	WEL-MUL D	Primary emulsifier for Diesel systems							X	X	E	FR	HPHT
Weatherford	WEL-MUL DME	Emulsifier for direct emulsion WBM fluids	X	X		X	X				E		
Weatherford	WEL-MUL E	Emulsifier for low density systems						X	X	E	E	FR	
Weatherford	WEL-MUL FR	Emulsifier for deep water system						X	X	E			SH
Weatherford	WEL-MUL HT	Primary emulsifier for HT						X	X		E	FR	SH
Weatherford	WEL-OX L	Liquid oxygen scavenger	X	X	X	X	X	X			CO		SH
Weatherford	WEL-OX P	Powder oxygen scavenger	X	X	X	X	X	X			CO		SH
Weatherford	WEL-PAC LV	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC LVT	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC R	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC RDF	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC RAT	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC SUPER LV	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC SUPER R	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PAC SUPER UL	Polyanionic cellulose	X	X	X	X	X	X			FR	V	SH
Weatherford	WEL-PLEX	Synthetic polymer viscosifier for NAF							X	X	V		
Weatherford	WEL-PLUG	Nut shells	X	X	X	X	X	X	X	X	LO		MLCM
Weatherford	WEL-POL SP	Sodium polyacrylate	X	X	X	X	X				FR		
Weatherford	WEL-REX	Polyanionic, lignin resin	X	X	X	X		X			FR	SH	
Weatherford	WEL-SCAV HS	Liquid H2S Scavenger	X	X	X	X	X	X			CO		
Weatherford	WEL-SEAL GR	Graphite bridging agent	X	X	X	X	X	X	X	X	LO		LU
Weatherford	WEL-SEAL GR FINE	Graphite bridging agent - fine size	X	X	X	X	X	X	X	X	LO		LU
Weatherford	WEL-SPERSE	Chrome lignosulphonate		X	X			X			TH	FR	

# World Oil's Fluids 2015

Available from:	Product tradename	Description of material	Non-dispersed	Dispersed	Calcium-treated	Polymer	Low solids	Saturated salt	Oil-based	Synthetic-based	Air, mist, foam, gas	Primary	Secondary	Secondary
	Weatherford WEL-SPERSE CF	Chrome-free lignosulphonate	X	X				X				TH		
	Weatherford WEL-SPERSE FE	Iron lignosulphonate	X	X	X	X	X	X				TH	FR	
	Weatherford WEL-SPERSE HT	TH and TE for HT environments.	X	X	X	X	X	X				TH		
	Weatherford WEL-SPOT	Non-weighted spotting fluid	X	X	X	X	X	X				P		
	Weatherford WEL-SPOT NAF	Spotting agent for SBM							X	X		P		
	Weatherford WEL-SPOT W	Weighted spotting fluid	X	X	X	X	X	X				P		
	Weatherford WEL-SQUEEZE	High solids, high fluid loss LCM squeeze	X	X	X	X	X	X	X	X		LO		
	Weatherford WEL-STAB	Sulphonated asphalt	X	X	X	X	X	X	X	X		SH	FR	
	Weatherford WEL-STAB PLUS	Premium sulphonated asphalt	X	X	X	X	X	X	X	X		SH		
	Weatherford WEL-STAR	Pregelatinised corn starch	X	X	X	X		X				FR		
	Weatherford WEL-STAR CMS	Modified polysaccharide	X	X	X	X	X	X				FR		
	Weatherford WEL-STAR HP	Hydroxypropyl Starch	X	X	X	X	X	X				FR	V	
	Weatherford WEL-STAR NF	Non fermenting, pregelatinised starch	X	X	X	X						FR		
	Weatherford WEL-STAR PLUS	HT modified starch	X	X	X	X	X	X				FR		
	Weatherford WEL-STAR RDF	High purity starch for RDF	X		X	X	X					FR	RDF	
	Weatherford WEL-STAR RDF PLUS	Premium RDF starch	X		X	X	X	X				FR	RDF	
	Weatherford WEL-STAR Y	Modified starch derivative	X	X	X	X	X	X				FR		
	Weatherford WEL-TEC	Secondary emulsifier - synthetic-based							X	X		E	FR	
	Weatherford WEL-TEC D	Secondary emulsifier - diesel-based							X	X		E	FR	HPHT
	Weatherford WEL-TEMP	HT filtration control	X	X		X	X					FR		HPHT
	Weatherford WEL-TEMP II	HT filtration control	X	X	X	X	X	X				FR		
	Weatherford WEL-THIN	Polyacrylate anionic polymer	X	X		X	X	X			X	TH		
	Weatherford WEL-THIN HT	TH for HT environments	X	X	X	X	X	X				TH	FR	
	Weatherford WEL-THIN HT L	Liquid TH for HT environments	X	X	X	X	X	X				TH	FR	
	Weatherford WEL-THIN L	Liquid, low-molecular-weight anionic polymer	X	X		X	X	X			X	TH		
	Weatherford WEL-THIX MMO	MMH	X									V		
	Weatherford WEL-TONE	Organophilic lignite							X	X		FR		
	Weatherford WEL-TROL	FR for NAF							X	X		FR		
	Weatherford WEL-TROL F	Liquid FR for NAF							X	X		FR	HPHT	
	Weatherford WEL-TROL FR	Fluid loss control in flat rheology systems							X	X		FR		HPHT
	Weatherford WEL-TROL HT	HT softening point gilsonite							X	X		FR		
	Weatherford WEL-VIS	Organophilic clay							X	X		V	FR	
	Weatherford WEL-VIS 38	Organophilic Hectorite clay							X	X		V	FR	
	Weatherford WEL-VIS 42	HPHT organophilic clay							X	X		V	FR	
	Weatherford WEL-VIS II	Organophilic clay							X	X		V	FR	
	Weatherford WEL-WASH	Biodegradable rig wash	X	X	X	X	X	X	X	X		WBC		
	Weatherford WEL-ZAN	Xanthan gum - API/ISO Spec	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN CL RDF	Clarified xanthan for RDF	X	X	X	X	X	X				V	RDF	
	Weatherford WEL-ZAN D	Xanthan gum, readily dispersible - API/ISO Spec	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN L	Xanthan gum, liquid	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN PLUS	Xanthan gum, premium grade	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN PLUS D	Xanthan gum, premium grade readily dispersible	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN T	Xanthan gum, technical grade	X	X	X	X	X	X				V		
	Weatherford WEL-ZAN TD	Xanthan gum, technical grade readily dispersible	X	X	X	X	X	X				V	HPW-BM	
	Well Flow K+FERROUT	Scale dissolver	X						X	X		CO		
	Well Flow K+HDC	Pipe-release agent	X						X	X		P		
	Well Flow KOPLUS LL	Pipe-release agent	X									P		
	Well Flow KOPLUS LO	Non-aromatic mud displacement intermediary	X									SU		
	Well Flow NO-PHALT	Asphaltine dispersant										SU		
	Well Flow RINSE AID	Biodegradable surfactant to water-wet tubulars	X	X	X	X	X	X	X	X	X	SU		
	Well Flow RINSE AID 2000	Environmentally-friendly surfactant powder	X	X	X	X	X	X	X	X	X	SU		
	Well Flow SUPER PICKLE	Non-aromatic biodegradable pipe dope and mud remover							X	X		SU	P	
	Well Flow SUPER PICKLE C	Environmentally-friendly pipe dope and mud remover							X	X		SU	P	
	Well Flow SUPER PICKLE T	Non-aromatic biodegradable pipe dope and mud remover							X	X		SU	P	
	Wyo-Ben DRILL-X	Drilling detergent	X			X						LU	SU	
	Wyo-Ben EXTRA HIGH-YIELD GEL	Extended bentonite	X			X						V		
	Wyo-Ben HYDROGEL	API drilling fluid	X			X						V	FR	SH
	Wyo-Ben NATURAGEL	API drilling fluid	X			X						V	FR	
	Wyo-Ben PLUGZ-IT	Lost circulation material	X			X						LO		
	Wyo-Ben THINZ-IT	Polymeric thinner	X			X	X					TH		
	Wyo-Ben UNI-DRILL	Liquid polymer for mud conditioning	X			X	X					FR	V	
	Wyo-Ben WYO-FOAMER	Foaming agent							X			FO		
	Wyo-Ben WYO-VIS	Polymer V (PHPA)	X			X	X					V	SH	

<b>A</b> = Alkalinity (pH control)	<b>CO</b> = Corrosion inhibitors	<b>HPHT</b> = High pressure/high temperature	<b>P</b> = Pipe-freeing agents	<b>TE</b> = Temperature stability agents
<b>AC</b> = Anionic control	<b>D</b> = Defoamers	<b>HPWB</b> = High performance, water-based	<b>RDF</b> = Drill-in fluid	<b>TH</b> = Thinners, dispersants
<b>B</b> = Bactericides	<b>E</b> = Emulsifiers	<b>HS</b> = Hydrate suppressant	<b>SB</b> = Synthetic-based	<b>V</b> = Viscosifiers
<b>BR</b> = Breakers	<b>FR</b> = Filtrate reducers	<b>LO</b> = Lost circulation additives	<b>SH</b> = Shale-control agents	<b>W</b> = Weighting materials
<b>CA</b> = Calcium removers	<b>FL</b> = Flocculants	<b>LU</b> = Lubricants	<b>SU</b> = Surface-active agents	<b>WBC</b> = Wellbore cleanout
<b>CF</b> = Completion fluid	<b>FO</b> = Foaming agents	<b>MLCM</b> = Massive lost circulation material	<b>T</b> = Tracers	<b>WBM</b> = Water-based mud

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**Sponsorship opportunities:** Andy McDowell, Associate Publisher,  
at +1 (713) 520-4463 or Andy.McDowell@WorldOil.com

**Editorial inquiries:** Roger Jordan, Associate Editor,  
at +1 (713) 520-4465 or Roger.Jordan@WorldOil.com



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