



**enventives**

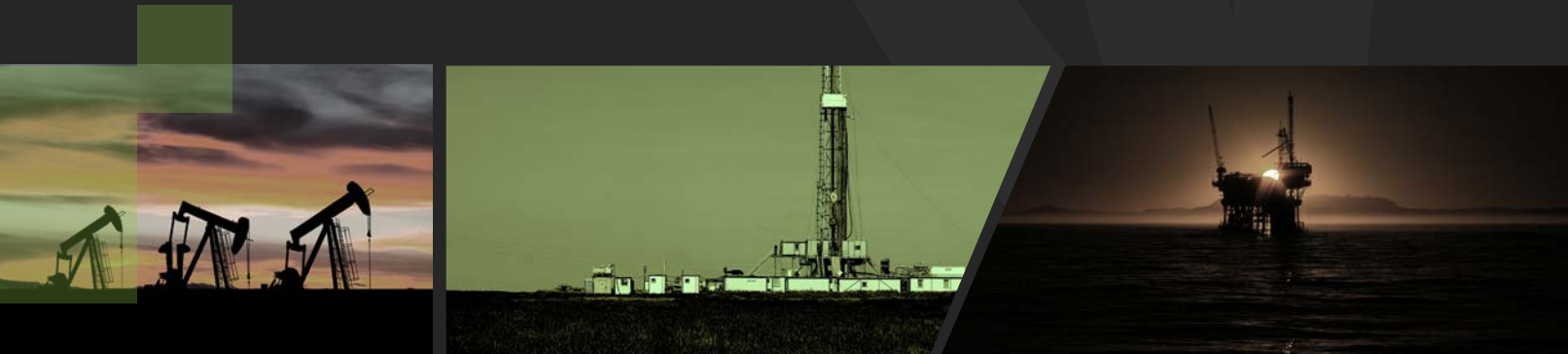
# PRODUCT PORTFOLIO

2017-2018

**EVOLVING SOLUTIONS & INDUSTRY PROVEN DRILLING FLUID PRODUCTS**

**WE INNOVATE OTHERS DUPLICATE**

enventives is the premiere wholesale manufacturer of the highest performing seepage loss additives for use in all types of drilling fluids systems



**MANUFACTURING • GRINDING • BLENDING • SIZING**



enventives

# EVOLVING SOLUTIONS & INDUSTRY PROVEN DRILLING FLUID PRODUCTS



## ABOUT US

enventives offers a complete line of loss circulation material, seepage loss additives, fluid loss additives and other specialty products developed to solve your biggest problems.

enventives products are proven and our prospects are limitless. Whether we're producing a custom label product or working directly with a consumer, you'll be impressed with our technology, quality, price and service.

At enventives, our innovative solutions are based on polymers, fibers, colloids and surfactants derived from naturally-occurring materials. We provide superior performance over other synthetic or traditional products in an environmentally-friendly manner. We are hard-working, blue-collar green.

Our core focus is to be a powerful force in the oil and gas industry, while maintaining a strong presence in other areas, including the agriculture, water cleaning and wax oxidation fields.

Your business needs new ideas and technology to thrive. We understand. enventives will remain focused on the development of unique and innovative technologies to produce products which provide a variety of solutions for our partners. Inventing and manufacturing Specialty Chemicals is our business and our results are industry proven leaders. Let us help your company get ahead of the curve while staying within your budget.



enventives

CONTACT

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## THE MANUFACTURER YOU NEVER HEARD OF

For the almost 40 years, our team has been inventing, developing & supplying the most recognized drilling fluid additives in the industry.

Supplying most of the major third party suppliers of specialty drilling fluid additives with the most recognized names in the industry, we are **THE PROVEN LEADER** and **YOUR BEST CHOICE** for any drilling fluid products or solutions your company may require.

**MAKING  
SPECIALTY  
PRODUCTS  
EVERYDAY  
PRODUCTS**

With the changing environment in the oil industry, we are seeing a change in the way many companies are looking at the value and economics of specialty chemicals and technologies. As the market changes and learns how to operate with in a challenging environment, we feel its best for us to work as close to the end user as possible.

In bringing our products and our solutions to companies like yours directly, we can deliver you the best product at the best price for all of your needs encountered during drilling.



# LOSS CIRCULATION MATERIALS

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Premium & Low Cost  
Formulations Field Proven  
for 30+ Years

Based on our originally patented novel technology to micronize & surface modify any type of cellulose, Ven-Fyber™ products are in use all over the globe due to superior and proven performance along with our unique approach to the technology.

Our laboratories are where the initial concepts and applications techniques for seepage-loss additives were developed. Our technology is utilized in seepage loss, severe loss circulation, squeeze products as well as pill and sweep applications.

Strategically located in the Permian Basin, our Seagraves TX facility can provide FOB pricing on the Premium & Low Cost Products you need.

Where & When You Need Them



## HIGH FLUID LOSS / HIGH SOLIDS SLURRY LOST CIRCULATION PLUGS

Enventives is the unquestioned industry leader in the developing, manufacturing and servicing the best selling and best performing squeeze products available today. We know more about solving your problems in this area than anybody in the market - including your current supplier.

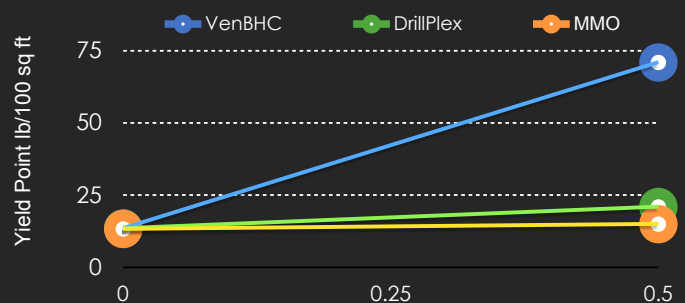


## Ven-BHC™

### A Low-Cost & Superior Replacement for MMO/MMH Drilling Systems

Our Ven-BHC™ drilling fluid system is capable of remarkable solids suspension, yet exhibits extreme shear thinning flow characteristics. Ven-BHC™ is a patented proprietary Poly Hydroxy Silicate technology which through rheology modification, provides superior hole cleaning for drilling, milling and HDD applications and is especially effective when drilling unconsolidated, unstable, stressed or faulted formations.

Yield Point Behavior of Ven-BHC™ vs DRILPLEX™ & MMO at 0.5 lb/bbl in 10 lb/bbl Treated (Peptized) Bentonite





# PRODUCTS

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## APHRON TECHNOLOGY

- APHRON ICS™
- POLYPHRON ICS™

## POLY HYDROXY SILICAT E TECHNOLOGY

- VEN-BHC™
- VEN-BHC™ HT

## ORGANOPHILIC LIGNITE TECHNOLOGY

- VEN-CHEM 215™
- VEN-CHEM 222™
- VEN-CHEM 208™

## VEN-FYBER TECHNOLOGY

- VEN-FYBER 201™
- DELTA P™
- REMEDY™
- REMEDY SC™
- VEN-FYBER SEAL™ (F,M,C)
- VEN-FYBER SC™
- VEN-TROL 401™
- VEN-PEL I™ & VEN-PEL II™
- VEN-SWEEP™
- VEN-LUBE II™

## VEN-SQUEEZE TECHNOLOGY

- VEN-SQUEEZE™
- QUICK SQUEEZE™

## TREATED LIGNITE TECHNOLOGY

- VEN-REZ II™
- VEN-REZ I™
- VEN-ALK™
- VEN-K™

## SPECIALTY PRODUCTS & TECHNOLOGY

- VEN-BLOCK™
- VEN-EXTEND™
- VEN-PLUG / VEN-PLEX™
- VEN-BREAK 15™
- VEN-LUBE I™
- VEN-BREAK HT™



## PRIVATE LABEL & CUSTOM BLENDING

Your know what you want? We are here to lower your costs on your custom blended products. We've doing that for 30 years.

[GIVE US A SHOT](#)

Combined with our top of the line Specialty Products & Service, you can increase your margins on your staple products and not miss out on the Premium Products the 3rd Party Specialty Companies are saying you don't have.







## MAKING THE BEST PRODUCTS IN THE MARKET TODAY

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“To compete with the best products in the market today, you have to be buying your products from the ONLY Company that is making those products. “

That Company



**enventives**



## THE FUTURE

We can do for you what we have been doing for 30 years - building the products of the FUTURE. Make sure the next product of the FUTURE is your product and not your competitors.

We build truly unique products, that solve your unique problems. We don't just give you a "special" blend that's just a little different. We provide you a truly unique product for your unique problems.

ASK YOUR CURRENT SUPPLIER IF THEY DO

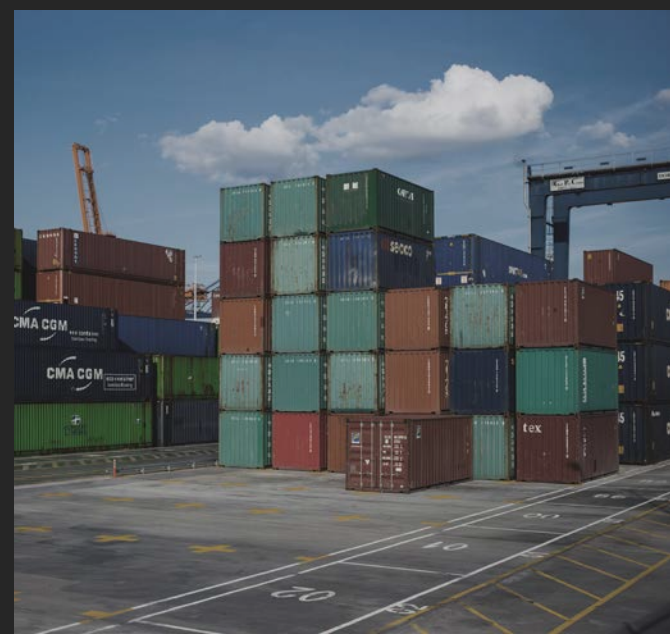


enventives

## OUR PROMISE

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WE PROMISE TO MAKE  
YOUR PROBLEMS  
OUR PROBLEMS





# Permian Basin Logistics

Located in the heart of the Permian Basin West Texas Region, our Seagraves TX facility is an ideal strategic location for oil & gas logistical support. With 110 acres of storage land for operational support, 75,000 square feet of warehousing and rail service, Enventives can provide the necessary logistics for your oil & gas operations.

Our facility can provide 24 hour service of product storage and handling, processing, blending, manufacturing of various products used in drilling, frac, completion, and production operations.

Capabilities include:

- 24 hour material handling and packaging capabilities.
- Outside and inside storage capabilities
- 110 acres for equipment storage
- 75,000 sq ft. warehousing storage
- Railroad Capabilities (Cost Advantage of Midland/Odessa Rail)
- Manufacturing/Packaging/Labeling/Bagging capabilities





## Oil Based Fluid Loss

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enventives, LLC specializes in organo-lignite (amine lignite) derivatives based on the reaction of humic acids (derived from oxidized lignite) with various high molecular weight organic compounds such as, but not limited to, fatty amines.

These reactions result in a conversion of normally water soluble/dispersible humates into Organo-Humates that are soluble/dispersible in non-aqueous solvents such as oils.

These organo-humates are black, free flowing powders that produce colloidal dispersions in non-aqueous systems.

Our Ven-Chem™ organo-lignites are a useful specialty fluid loss additive for oil base drilling fluids. Due to their colloidal nature and controlled solubility in diesel and mineral oils, they can be used to control the fluid loss properties of oil base fluids at temperatures up to 500° F and with special application techniques, they have even been effective at temperatures exceeding 500° F.

We are one of the few suppliers in the world with mass production capabilities for organo-lignites and we have a successful 30-year history in developing and producing these products for our global customer base.

# What is a Ven-Chem™?



A NonAsphaltic Fluid Loss additive for your Oil Based drilling fluids without the formation damage and expensive cleanups during completion operations.

## EXPERIENCE THE VEN-CHEM™ ADVANTAGE

eventives, LLC specializes in the manufacture of organo-lignites (amine treated lignites). We are one of the few suppliers in the world with mass production capabilities and one of even fewer with a history of researching, developing and producing these types of products.

Our organo-lignite was originally designed as a non-asphaltic, oil dispersible fluid loss additive for oil muds and invert oil mud systems. Our Ven-Chem™ products are an economical alternative to gilsonite products, asphalt products and oil soluble polymers. Eventives produces a family of organo-lignite derivatives based on the reaction of humic acids (derived from oxidized lignite) with various high molecular weight organic compounds such as, but not limited to, fatty amines. These reactions result in a conversion of normally water soluble/ dispersible lignites into ORGANO-LIGNITES that are soluble/dispersible in non-aqueous solvents such as oils. These organo-lignites are black, free flowing powders that produce colloidal dispersions in non-aqueous systems.

Our Ven-Chem™ organo-lignites are a useful specialty fluid loss additive for oil base drilling fluids. Due to their colloidal nature and controlled solubility in diesel and mineral oils, they can be used to control the fluid loss properties of oil base fluids at temperatures up to 500° F and with special application techniques, they have been effective at temperatures above 500° F.

Ven-Chem™ organo-lignites offer a better cost per performance than gilsonite products, asphalt products and oil soluble polymer products. The controlled solubility and no melting/softening point properties of the Ven-Chem™ organo-lignites minimize the amount of formation damage and considerable clean up costs which are normally associated with gilsonite and asphalt products. In most applications our Ven-Chem™ organo-lignites have little to no effect on the rheological properties of the drilling fluid.

Some of the useful secondary properties our Ven-Chem™ organo-lignites provide are as emulsification enhancement, emulsion stabilizer, and dispersant in certain types of oil based drilling fluid systems. Ven-Chem™ organo-lignites can also be used in special slug treating situations in water based drilling

fluids. They can be incorporated into an oil pill and added with a special slugging technique whereby the pill is pumped around the hole. This is particularly useful in cases of differential pressure sticking in pressure depleted sands.

eventives proudly offers the premium Ven-Chem™ organophilic lignite line of oil based fluid loss products:

- Ven-Chem 215™
- Ven-Chem 208™
- Ven-Chem 222™

Testing is highly recommended to the pick best cost/performance product for you application. The specific additives, orders of additions, temperature, shear time and other factors can influence solubility and performance of the specific Ven-Chem.

Varying systems in similar conditions might require a different Ven-Chem™ additive or concentration to realize similar results. The Ven-Chem™ fluid loss additives should be bench tested in the fluid system under expected field conditions to determine the best Ven-Chem product to utilize in the fluid system.

For example, some customers have found they can utilize Ven-Chem 215™ in their fluid systems at temperatures above 300°F. If it is known that sustained temperatures above 350°F will be encountered Ven-Chem 208™ and Ven-Chem 222™ should be evaluated for use in the system. For sustained temperatures below 350°F Ven-Chem 215™ and Ven-Chem 208™ should be evaluated for use in the system.

In the event of any testing issues or problems with the Ven-Chem™ products please let us know so we can share our knowledge, experience and expertise in the usage of our Ven-Chem™ organo-lignite products.

The eventives team will provide technical assistance to our customers and clients with regards to our products and their compatibility within their fluid systems. Technical assistance is available for the design and testing of complete fluid systems as well as the handling of routine or special drilling issues.

**THE VEN-CHEM™ ADVANTAGE  
3 PRODUCT CHOICES OF  
NON-HAZARDOUS, NON-TOXIC, AND NON-FORMATION DAMAGING  
ORGANOPHILIC LIGNITES FOR THE REDUCTION OF OIL-BASED MUD FLUID LOSS**



## Water Based Fluid

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enventives, LLC provides a line of water based drilling fluid systems and components to meet our customers growing needs for high performance aqueous based fluids. The newest MMS technology was developed in the enventives, LLC laboratories and is utilized in our Ven-BHC™ product line providing enhanced bentonite rheology for our customers around the world.

The enventives, LLC laboratories are responsible for the reaserch, development and success of the APHRONICS™ (Invasion Control System), an engineered drilling-fluid system that controls

losses in depleted, high-porosity sands while stabilizing pressured shales. The Aphron Invasion Control System™ increases shale stability, thereby greatly reducing drilling problems commonly associated with laminated sand/shale sequences. The APHRONICS™ design significantly decreases the potential for differential sticking and other fluid related problems. The outstanding performance of this system makes it a sound economic option for areas where lost-circulation material has proven ineffective in controlling drilling-fluid losses, high-angle/horizontal wells and depleted formations to name a few.



# IS Ven-BHC™ PART OF YOUR NEXT H.D.D. FLUIDS PROGRAM?

Several problems plague the HDD industry that are directly associated with drilling fluids. The purpose of this summary is to showcase the marketability of this unique Ven-BHC™ (also known as Poly Hydroxy Silicate) Fluid System by solving many of the traditional HDD drilling fluid problems.

Some of the proven benefits of the Ven-BHC™ (H.D.D. Drilling Fluid System) include:

- Hole cleaning
- A “simple” fluid system
- Ease of use
- Increased ROP
- Less frac outs
- Less pack offs
- Directional control
- Less shipping / trucking costs
- Less overall ‘material’ usage and handling (ex. Bentonite)
- Corrosion inhibition
- Extended bit and/or cutter life
- Less drill string erosion
- Maximize solids control efficiency
- Overall Cost savings (example days saved in drilling time)
- Unique high / low end rheology (High Yield Point / Low Plastic Viscosity)



The primary reason for using a Ven-BHC™ - - (Poly Hydroxy Silicate) System on your next borehole, is first and foremost (although not exclusively) - - hole cleaning.

The reason for ‘frac outs’ and ‘pack offs’, poor directional control and short cutter life are directly related to poor hole cleaning. The conditions that result in hole ‘pack offs’ and ‘frac outs’ are eliminated with the Ven-BHC™ - H.D.D.

Fluid System. In addition the cuttings bed build ups that effect the efficiency of directional steering tools are removed or greatly reduced. Another benefit of using the Ven-BHC™ Fluid System, is improved solids control, over all equipment efficiency and less pump wear and repair.

It may ‘look’ like the hole is being cleaned, due to the volume of sand (or whatever is produced over the shakers) but there is another far larger amount that can’t be seen and therefore left in the hole. The Ven-BHC™ fluid is a unique ‘zero slip velocity’ fluid. Typical rheology for this fluid would be in the range of 2 to 10 plastic viscosity and 35 to 80 yield point. 10/sec. and 10/min. gel strengths are typically high and relatively flat and non-progressive.



This translates into a fluid with extremely effective flow properties and hole cleaning characteristics.

This Ven-BHC™ Fluid is also by nature very “thixotropic” (or shear thinning), meaning that when the mud is static or sitting still, it very rapidly thickens (almost a gelled solid).

But, when the mud is dynamic or moving, it rapidly thins (almost water like). This dynamic fluid would maintain and hold cuttings in ‘situ’ - - even as the fluid moves - - and of course when the fluid is at rest - - always while maintaining good hole conditions

and suspension throughout. Superior hole cleaning, enhanced ROP, and reduced downtime with a more economic fluid system will get you to the other side faster and easier than ever before.

**STILL NOT CONVINCED?  
SAVE YOURSELF A SIDETRACK  
AND GIVE US A CALL BEFORE  
YOU GO IN THE WRONG  
DIRECTION.**



## Aphron ICS Invasion Control System

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enventives, LLC offers our patented innovative drilling fluid technology that incorporates uniquely structured micro-bubbles called Aphrons. Aphrons serve as a first line of defense to prevent leak-off during the initial invasion period after a drill bit cuts into rock. Our AphronICS™ technology has highly successful field proven

capability in drilling depleted reservoirs and other low-pressure or permeable formations by solving many issues such as fluid loss control, formation damage, differential sticking and stabilization of multi-pressure sequences with one fluid. The AphronICS™ drilling fluid reduces whole mud loss and minimizes collateral damage



The versatile aphron drilling fluid system offers unique mechanical and economic solutions which can produce increased profit for your company while reducing your customers overall well construction cost.

Utilizing the aphron technology will allow your company to engage in an untapped market, providing a unique and cost effective solution to common fluid related exploration dilemmas. Many operators will relate previous field problems that may have benefitted from an aphron technology solution.

AphronICS™ Low-Shear-Rate Viscosity (LSRV), combined with its stable microbubbles, helps you control losses when drilling through depleted reservoirs. In addition, the flexible microbubbles enable operators to economically access reserves where depletion has altered the mechanics of the field, forcing the use of additional casing strings or costly underbalanced-drilling techniques.

There is nothing unusually complicated about building AphronICS™ or maintaining its excellent rheological properties during drilling. The high-LSRV base fluid consists of a High-Yield Stress-Shear-Thinning

(HYSST) polymer coupled with proprietary components that create and stabilize the aphrons within the system. An exclusively formulated aphronizer is incorporated to reach the desired concentration of microbubbles, which typically is 10 to 15% by volume. As the concentration builds, it is not uncommon to see the Brookfield LSRV increase to between 120,000 and 160,000 cP. Once the system is circulating, the rheological properties are easily maintained to provide optimal hole cleaning, cuttings suspension and a high degree of control over the invasion of whole drilling fluid.

In hundreds of wells the world over, operators have seen firsthand the economic advantages of AphronICS™. Many have been high-angle or horizontal wells, where wellbore stability and drilling efficiency have been shown to reduce construction days by as much as 50%. In some situations, intermediate casing strings have been eliminated, resulting in even greater cost savings. The microenvironment bridging has consistently and substantially improved well construction economics by mitigating drilling problems and delivering highly stable boreholes.



AphronICS™ simplifies completions, too. In fact, cleanup has consistently been reduced to as few as two days in high-porosity sands where 30 days had been the norm.

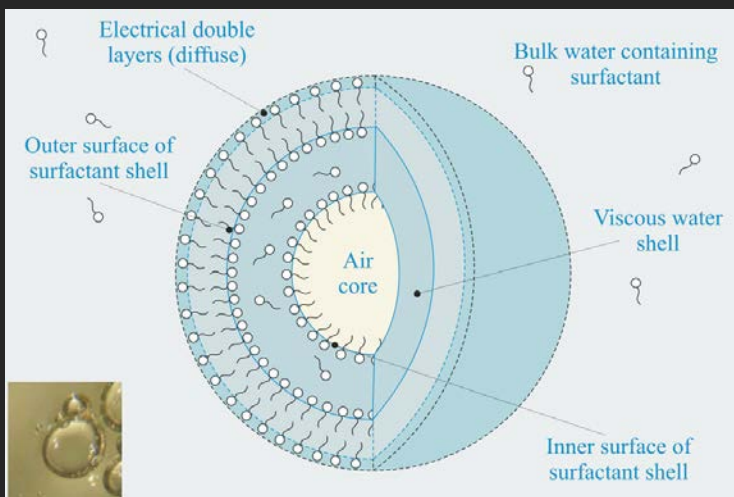
The organic, biodegradable polymers and non-caustic pH materials that make up AphronICS™ provide a healthy balance between operational efficiency and environmental acceptability. The system meets or exceeds regulatory statutes, such as those for the Gulf of Mexico, Canada and the North Sea.

Aphron Fluid Technology systems are built with conventional mixing and surface equipment standard to drilling rigs. Once the base fluid has been built to a minimum LSRV of 50,000 cPs the aphron generating package is added through the mud hopper. The air, shear and pressure drop associated with mixing through the hopper will create a 10 - 15% volume of aphrons into the base fluid system.

Aphrons aggregate when forced together and function like one large pressure diverting seal. The Aphron Fluid Technologies are a two phase solution. The technology is focused on improving drilling, workover and completion operations where significant pressure differentials exist.



**APHRONICS™ IS A FIELD PROVEN PRODUCER. OUR APHRONICS™ IS A PROACTIVE SOLIDS FREE LOST CIRCULATION SOLUTION. APHRONICS™ IS WHERE YOU NEED IT, WHEN YOU NEED IT AND MOST OFTEN BEFORE YOU EVER KNEW YOU NEEDED IT.**



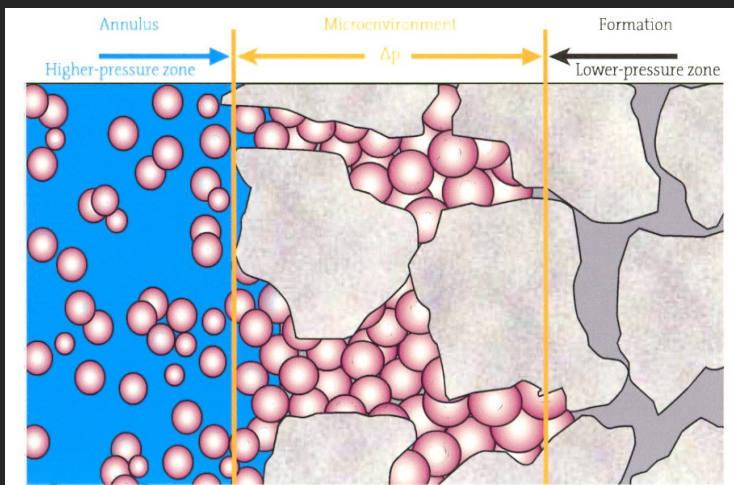
### What is AphronICS™?

A variable density fluid system with density variability from >3.0 to 16.0 ppg.

An at balance fluid system with equalized hydraulic pressure between the wellbore and formation.

A solids free system incorporating micro-bubbles under pneumatic pressures for invasion control.

A fine tuned rheology engineered for minimal fluid loss, superior hole cleaning and excellent borehole stability



The water-base APHRONICS invasion-control system uses stable, energized microbubbles of air ("aphrons") to control losses to troublesome formations. When a low-pressure zone is drilled, the aphrons enter the formation where they expand to equalize formation pressure, effectively protecting the formation from fluid invasion. Standard rig equipment and mixing-hopper turbulence are the only requirements for creating the aphrons. This system should not be confused with foam drilling; it requires no external air source.

The AphronICS™ (Invasion-Control System) is an engineered drilling-fluid system that controls losses in depleted, high-porosity sands while stabilizing pressured shales. This means you can use conventional drilling equipment to successfully complete many reservoirs that previously would have been candidates only for underbalanced drilling. The system increases shale stability, thereby greatly reducing drilling problems commonly associated with laminated sand/shale sequences.

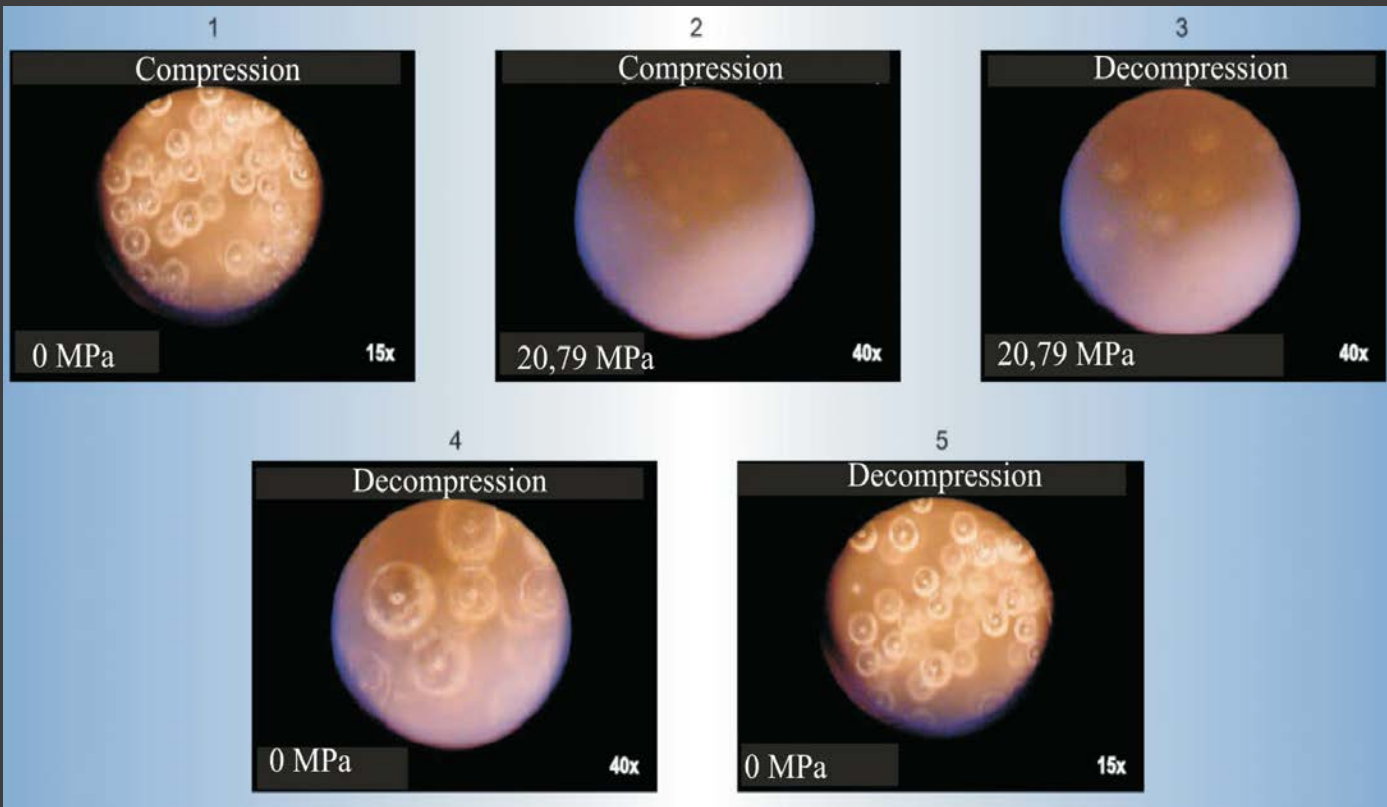
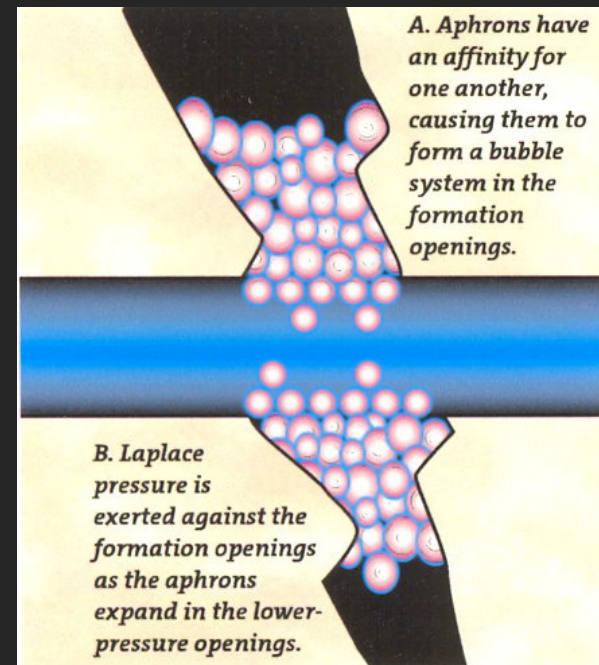
## ENERGIZED APHRONS HAVE AN ATTRACTION FOR EACH OTHER AND LOW-PRESSURE

Each aphron contains a gas nucleus of encapsulated air, and this enclosed air compresses when the microbubbles circulate down the hole. The internal pressure of these microbubbles increases at a rate proportional to the external pressure being applied. The combination of increasing pressure and temperature serve to energize the individual aphrons.

Once the bit exposes a depleted formation, the aphrons immediately aggregate within the openings of low-pressure zones. There, a portion of the energy stored within

each aphron is released, causing it to expand. The expansion continues until the internal and external pressures on the wall of the aphron are in balance.

As the energized microbubbles enter formation openings, they carry energy equal to that of the annulus. As they crowd into an opening, external Laplace forces increase dramatically, causing aggregation and an increase in the internal LSRV. The microenvironment created by this phenomenon assists in reducing fluid invasion.



**THE RESILIENT MICROBUBBLES CALLED APHRONS ARE CAPABLE OF COMPRESSION AND DECOMPRESSION AT PRESSURES GREATER THAN 4000 PSI. THIS ENABLES THE APHRONICS™ TO CREATE THE MICRO ENVIRONMENTS NECESSARY TO BALANCE PRESSURE BETWEEN THE ANNULUS AND THE FORMATION AND TO MAINTAIN THE BRIDGE AND SEAL ACROSS THE PORE THROATS OF A THIEF ZONE.**



## Lost Circulation and Seepage Loss

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enventives, LLC incorporates our originally patented novel technology to micronize and surface modify any type of cellulose. Our VEN-FYBER™ products are in use all over the globe due to superior performance and our unique approach to the technology. enventives, LLC laboratories are where the initial concepts and application techniques for seepage loss additives were developed. Our VEN-FYBER™ technology is utilized in seepage loss additives, severe loss circulation additives, squeeze products and has pill and sweep applications.

# VEN-FYBER 201™

## THE OFTEN IMITATED NEVER DUPLICATED FYBER WITH A “Y” THE ORIGINAL MICRONIZED CELLULOSE FIBER.



Made in the USA still holds true at enventives today just as it always has. We appreciate and support our local farmers and utilize their agricultural streams into our micronized cellulose fiber products and blends.

We have been continually improving our processes and technologies for the past 40 years, longer than anyone else in the industry. Ven-Fyber 201™ was the first micronized cellulose fiber product introduced to the oil and gas fluids market.

Shortly thereafter Delta P™ was introduced to provide a cost effective solution for customers requiring a waterbase fluid only application.

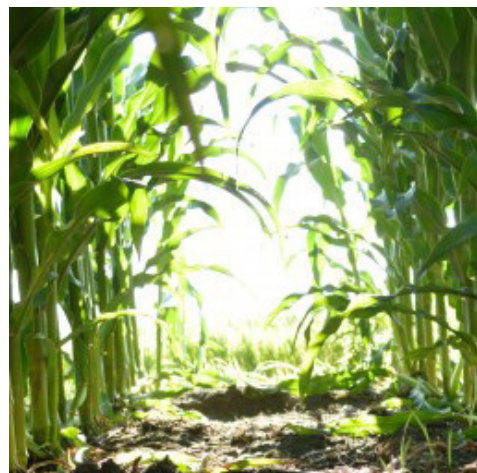
Originally conceptualized as a seepage loss additive, wall cake conditioner, fluid stabilizer and delivery system for concentrating oils and other liquids into the wall cake of aqueous fluids our Ven-Fyber™ technology was truly unique. From those discoveries the possibilities opened up for the marketplace enabling the development of several product lines for customers all over the world.

Our expertise in the research, development, sourcing, manufacturing and production of

micronized cellulose fiber products remains unparalleled in the industry.

Our products remain the standard to what other products are compared. There are abundant choices available to you today, but we will make the right decision easy for you. If your Fyber™ doesn't have a “Y” then it is not the best fiber you can be getting.

Our products are field proven around the world in the harshest of environments. Proven results not internet videos will save you time and money.



The enventives team is dedicated to inventing cutting edge products that are not only unique, but environmentally sound and cost efficient. We have developed products that are a blend of surface modified natural cellulose fibers that can be used in pills, squeezes, sweeps and maintenance treatments with minimal adverse effect on rheology and filtration control properties.

We have products specifically engineered for many common yet complex drilling fluid scenarios. Our Fyber™ products will provide excellent seepage and lost circulation control and are stable to high temperatures.

The cellulosic materials are specifically selected to provide optimum bridging and sealing of pore throats and microfractures and to help decrease the permeability of the wallcake in all drilling

fluid types.

Most Ven-Fyber™ products are designed to mix easily through the hopper. Most Ven-Fyber™ products are biodegradable and non-toxic. Ven-Fyber™ additions do not interfere with rig pumping equipment or downhole tools when used in the proper concentration ranges. Ven-Fyber™ products are liquid dispersible and compatible with water based and non-aqueous based fluids.

If your fiber doesn't have a “Y” you're paying too much for less than the optimum performance available. Why not buy from the organization that originated, developed and set the standards for seepage loss additives, Lost Circulation Materials and severe loss circulation squeezes?

**OUR GOALS FOR CONTINUED IMPROVEMENT ARE NOTICEABLE. EFFICIENT MANUFACTURING AND PRODUCTION COUPLED WITH MATERIAL SOURCING AND IN HOUSE RESEARCH AND DEVELOPMENT ENABLE US TO PROVIDE YOU WITH COST EFFICIENT PREMIUM PRODUCTS THAT WORK IN THE FIELD TODAY EVEN BETTER THAN THEY DID YESTERDAY.**



Ven-Fyber 201™ is the original micronized cellulose fiber seepage loss additive and multi-purpose mud conditioner. Ven-Fyber 201™ is more than just a standalone product, Ven-Fyber 201™ is a core component in many of the micronized cellulose fiber products that eventives offers. Although useful as a component of or enhancement to Lost Circulation Materials Ven-Fyber 201™ should not be compared as a Lost Circulation Material.

After several years of research and development Ven-Fyber 201™ was introduced and patented in 1981 as a novel technology to micronize and surface modify any type of cellulose. Ven-Fyber 201™ is a cellulose derivative manufactured from organic fibers which are micronized through a process of chemical and mechanical degradation followed by a surface modification process. The results are a fibrous product that flows like a powder and preferentially oil wets.

After subjected to 72 hours at 425°F hotroll there is minimal to no loss on the seepage loss control performance as measured by the ability to seal an unconsolidated sand pack.



Ven-Fyber 201™ and its derivative products have seen worldwide usage over the past 35 years. The many uses and applications of the Ven-Fyber 201™ family of products include:

- Pretreatment of mud
- Slug treatment - seepage
- High liquid loss-High solids slurry
- Matting/strengthening additive
- Conventional LCM additive
- Squeeze additive
- Competitor "A" - Gunk squeezes
- Sweep for hole cleaning
- Oil absorbent
- Trace oil removal agent
- Workover/completion additive - seepage control
- Liquid lubricant concentration
- Cement spearheads
- Spacer additive
- Spotting fluid additive

As a seepage loss additive Ven-Fyber 201™ does not significantly alter the properties of the drilling fluid. Ven-Fyber 201™ does not break the emulsion and provides some secondary emulsification and oil wetting properties. Ven-Fyber 201™ does not significantly increase the viscosity of the oil or water phase of the drilling fluid but does have suitable colloidal content to provide fluid loss control.

Ven-Fyber 201™ is effective in sealing highly permeable filtration medium and provides high/low temperature fluid loss in conventional API test procedures. Ven-Fyber 201™ is capable of bridging small fractures, yet it is small enough to be retained by conventional solids control systems.

Ven-Fyber 201™ is a premium wall cake conditioner. Its application reduces both permeability and thickness of the wall cake while also strengthening the wall cake. These properties also enable Ven-Fyber 201™ to provide the most desirable effect of reducing an environment conducive to differential sticking.

Our Ven-Squeeze™ product utilizes Ven-Fyber 201™ as a component of our High Water Loss High Solids Squeeze.

Ven-Squeeze™ is used to create a seal within a fracture during severe loss episodes. It can be used in both weighted and unweighted systems and is compatible in a variety of fluid phases. The Ven-Fyber 201™ component enables Ven-Squeeze™ to provide a seal in less time and with less pressure.

Our Ven-Fyber Seal™ Fine, Medium and Coarse products utilize Ven-Fyber 201™ as a component to

provide optimum particle size distribution and to provide superior bridging matting and strengthening of the filter cake. Ven-Fyber Seal™ Fine, Medium and Coarse products are a premium Lost Circulation Material and useful as a pretreatment product prior to entering known thief zones to minimize or eliminate the effects of loss circulation.

Ven-Lube II™ is our specialized solid drilling fluid lubricant based on our Ven-Fyber 201™ technology. Ven-Lube II™ is designed for use in water based drilling fluid systems. Ven-Lube II™ is surface modified, micronized cellulose fibers, which have been pretreated with an environmentally safe, oil lubricant. It is nonpolluting, biodegradable and nontoxic. Ven-Lube II™ is a solid drilling fluid lubricant with the benefits of seepage loss control. Ven-Lube II™ allows the lubricant to be carried to and concentrated in the wall cake as the fibers are filtered keeping the lubricant in the wallcake, where it will provide the most benefit.

Ven-Trol 401™ is a resin coated, micronized cellulose fiber and a member of the Ven-Fyber 201™ family of premium drilling fluid additives. Ven-Trol 401™ is a composition based on natural, modified micronized cellulose fibers and naturally occurring gilsonite. Ven-Trol 401™ was originally designed for water based drilling fluids but has been successfully utilized in some oil and synthetic based drilling fluid systems. Both the Fyber and gilsonite components are temperature stable above 425°F. Ven-Trol 401™ provides shale stabilization, seepage loss control, lubricity, and HTHP filtrate reduction while minimizing formation damage.

OUR MOST RECENTLY INTRODUCED PRODUCTS DERIVED FROM OUR INNOVATIVE RESEARCH AND DEVELOPMENT IN THE FIELD OF SURFACE MODIFIED MICONIZED CELLULOSE FIBER ARE TWO OF OUR MOST EFFECTIVE AND POPULAR PRODUCTS.

DIRECT FROM OUR LABORATORIES AND BASED ON OUR NEW QUICK2MIX™ TECHNOLOGY, REMEDY™ AND QUICK-SQUEEZE™ REMAIN INDUSTRY LEADERS FOR PREVENTATIVE AND CORRECTIVE MEASURES TO LOSS OF CIRCULATION.

Our new Quick2Mix™ surface modification technology, has been precisely engineered to provide ease of mixing for Remedy™ and Quick-Squeeze™ on location. The quicker you can get Remedy™ and Quick-Squeeze™ into solution the quicker you can get them downhole. Our new Quick2Mix™ technology eliminates or minimizes the need for additional products often required to be used in conjunction with the mixing of competitive products.

Remedy™ and Quick-Squeeze™ are liquid dispersable and effective in all types of drilling fluids (aqueous and non-aqueous) and can be used in weighted or unweighted systems and slurries. Remedy™ and Quick-Squeeze™ are quick and easy to mix one sack products. Both are easy to pump and can be pumped through down hole tools.

Remedy™ is the gold standard for protecting your wellbore from lost circulation events. Remedy™ provides a quick, effective and economical solution for partial to severe loss circulation events. The recommended Plan A of pre-treating the active mud system in anticipation of known thief zones has prevented the need to apply Remedy™ in its Plan B pill and sweep application in response to initial signs of lost circulation. Adding Remedy™ to your drilling fluid program is a formula for success.

Specifically engineered for protecting your well bore integrity as Remedy™ aides in hoop stress enhancement and increased fracture closure stress. Lost circulation and wellbore breathing are caused from drilling fluid invading the formation as a result of either hydraulically induced fractures or highly permeable formations or other types of thief zones such as natural fractures, vugs and faults. Remedy™ seals the wellbore fractures and isolates the fracture tips resulting in a stronger and more stable wellbore.

Quick-Squeeze™ is the most economically effective high solids content, high fluid loss lost circulation squeeze plug available. Like all of the copy cat products on the market today a solid plug is formed in the loss zone through the rapid defluidization of the Quick-Squeeze™ slurry leaving the broad particle size distribution of multiple surface modified cellulose Fiber™ derivatives to form a solid plug.


The Quick-Squeeze™ plug seals and bridges the thief zone below the face of the well bore safe from removal by or disturbance from the circulating of drilling fluid or the movement of the drill string. This minimizes the need for continued treatment and greater downtime from the same thief zone.

Quick-Squeeze™ slurries can be prepared ahead of time in preparation for drilling through known thief zones and held in the pit for extended periods of time with no reduction of effectiveness.

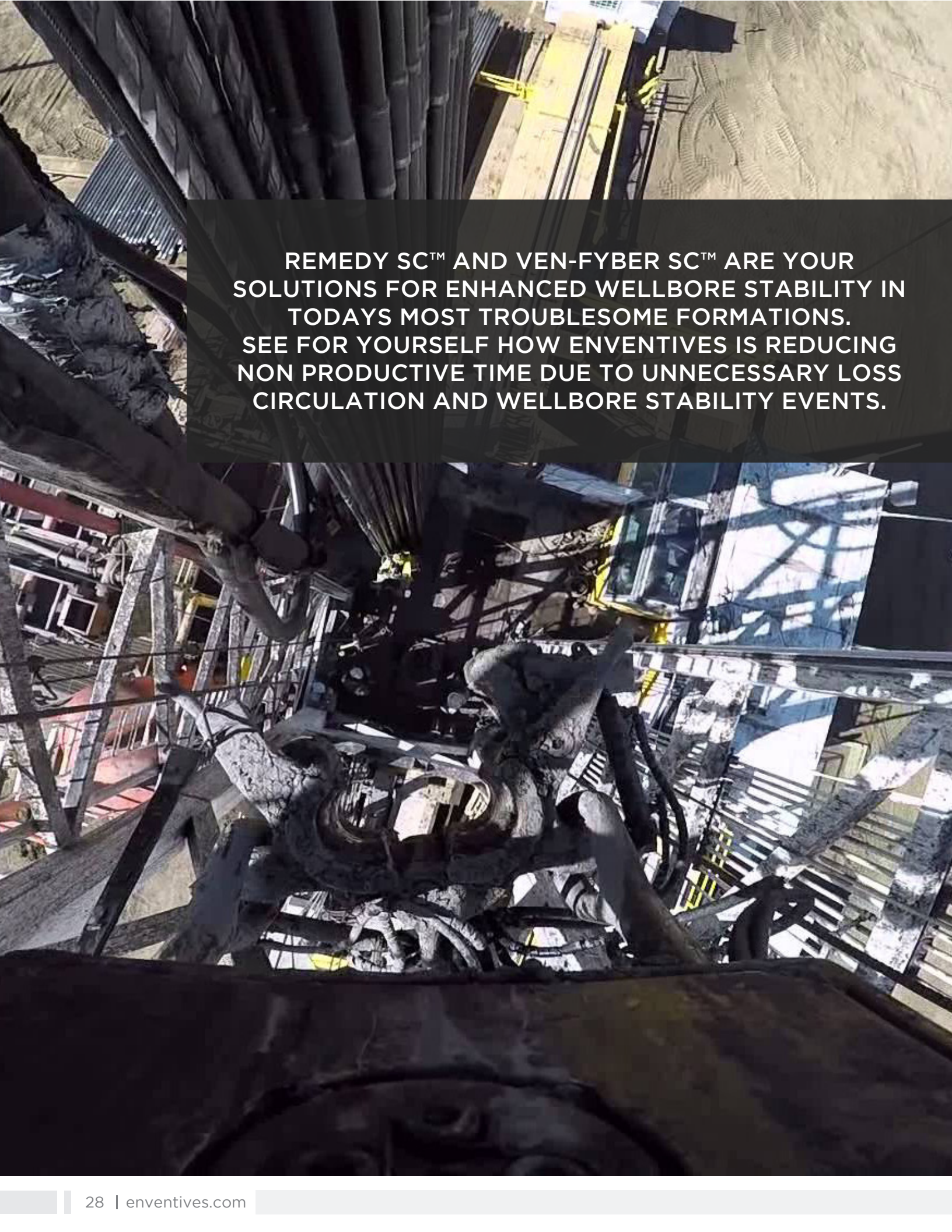
Quick-Squeeze™ has been utilized to seal loss zones in the open hole as well as perforations and damage in cased holes. Quick-Squeeze™ has eliminated the need for numerous sidetracks and costly cement operations thought to be the only option in massive lost circulation instances. Although application of Quick-Squeeze™ produces a solid plug it does not have the compressive strength required to "kick-off" and will not sidetrack the well.

Quick-Squeeze™ does not cause issues by contaminating the drilling fluid and is more economical than pumping multiple treatments of conventional LCM products not designed to solve severe loss circulation incidents. For a quick, clean and effective solution to severe lost circulation incidents there is no comparison to the cost benefit of the Quick-Squeeze™ severe lost circulation solution.



A high-angle, vertical photograph of an offshore oil rig deck. A large, white, cylindrical wellbore structure extends from the deck down into the dark blue ocean. The deck is yellow and features various pieces of equipment, including a red bucket and a large blue container. A worker in a blue jacket and white cap is visible on the deck, leaning over the wellbore. The ocean surface is choppy with whitecaps. The overall scene is industrial and maritime.

**REMEDY™ AND QUICK-SQUEEZE™ ARE YOUR  
LOST CIRCULATION SOLUTIONS  
SEE FOR YOURSELF HOW ENVENTIVES IS  
SQUEEZING OUT THE COMPETITION AND  
PREVENTING THIEF ZONES FROM DRAINING  
YOUR WELL BORE.**



**REMEDY SC™ AND VEN-FYBER SC™ ARE YOUR SOLUTIONS FOR ENHANCED WELLBORE STABILITY IN TODAY'S MOST TROUBLESOME FORMATIONS. SEE FOR YOURSELF HOW ENVENTIVES IS REDUCING NON PRODUCTIVE TIME DUE TO UNNECESSARY LOSS CIRCULATION AND WELLBORE STABILITY EVENTS.**

# STRESS CAGE TECHNOLOGY PRODUCTS

SPECIFICALLY DESIGNED FOR INCREASING WELLBORE HOOP STRENGTH BY CREATING A STRESS CAGE IN FRACTURED FORMATIONS AND INCREASE FORMATION INTEGRITY AND FRACTURE RESISTANCE. OUR PRODUCTS ARE ENGINEERED TO FORM A SEAL BEHIND THE PROPPANT NEAR THE WELLBORE TO REDUCE FLUID AND PRESSURE TRANSMISSION INTO THE FRACTURE.

Our Proactive LCM products utilizing our Stress Cage Technology are based on years of field success and leading the industry in the research, development and application of premium drilling fluid additives. Ven-Fyber SC™ and Remedy SC™ are specifically engineered to provide mechanical sealing and strengthening of weak troublesome formations. Both utilize our time tested and field proven Ven-Fyber™ technology to provide seepage loss control while preventing the conditions conducive to differential sticking. Ven-Fyber SC™ and Remedy SC™ provide formation strengthening through stress cage development. Both Ven-Fyber SC™ and Remedy SC™ are proactive products capable of preventing losses from ever occurring and are capable of sealing thief zones after losses have been realized. Ven-Fyber SC™ and Remedy SC™ can be used in conjunction with each other and can be used in conjunction with Quick-Squeeze™ in instances of severe lost circulation. Spotting pills, pumping sweeps or as whole system additives Ven-Fyber SC™ and Remedy SC™ do their job and do it well.

Ven-Fyber SC™ and Remedy SC™ are field proven to reduce drilling non-productive time due to lost circulation and costly wellbore stability issues.

25-100 bbl sweeps with 15-60 lb/bbl of Ven-Fyber SC™ or Remedy SC™ have been highly successful in the prevention and remediation of whole fluid losses. High viscosity treatments may be necessary to treat the most severe lost circulation events

4-10 lb/bbl treatments of the active fluid system have been successful in the elimination or reduction of whole fluid loss to thief zones while promoting strong thin filter cakes and enhancing the hoop stress of the weak formations.

Ven-Fyber SC™ and Remedy SC™ are Environmentally Safe and Non Toxic and are compatible with all fluid systems. Ven-Fyber SC™ and Remedy SC™ are capable of being pumped through downhole tools and prepared with standard rig equipment.





## Water Based Fluid Loss

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enventives, LLC provides a line of water based drilling fluid systems and components to meet our customers growing needs for high performance aqueous based fluids. The newest MMS technology was developed in the enventives, LLC laboratories and is utilized in our Ven-BHC™ product line providing enhanced bentonite rheology for our customers around the world.

The enventives, LLC laboratories are responsible for the reaserch, development and success of the APHRONICS™ (Invasion Control System), an engineered drilling-fluid system that controls

losses in depleted, high-porosity sands while stabilizing pressured shales. The Aphron Invasion Control System™ increases shale stability, thereby greatly reducing drilling problems commonly associated with laminated sand/shale sequences. The APHRONICS™ design significantly decreases the potential for differential sticking and other fluid related problems. The outstanding performance of this system makes it a sound economic option for areas where lost-circulation material has proven ineffective in controlling drilling-fluid losses, high-angle/horizontal wells and depleted formations to name a few.

## AN OVERVIEW OF THE USES OF LIGNITE- BASED FLUID LOSS ADDITIVES IN WATER-BASED DRILLING FLUIDS

enventives offers a number of uses of lignite and its derivatives as fluid loss additives in drilling fluids. Our laboratories have been at the forefront of Research and Development of these technologies.

Oxidized lignites contain a number of organic polyphenolic acids. These are usually referred to as humic acids and their salts are referred to as humates. In its natural state, Leonardite or oxidized lignite, occurs very near the surface with minor amounts of overburden. Exposure to air and water causes the mineral to become oxidized.

Naturally occurring oxidized lignite normally exhibits a pH of approximately 3.0-3.5. This material is only slightly soluble in water. Even when ground to drilling fluid grade specifications and mixed in water, the product

forms only a slurry that will readily settle. It exhibits no filtration control properties in this condition. Filtrates are extremely high and the color of the filtrate is light yellow, indicating almost no solubility.

As the pH of a lignite/water slurry is increased with alkaline compounds of sodium, potassium, lithium or ammonia; salts of the organic acids are formed and the lignite becomes partially soluble. As the solubility increases, the lignite is partially peptized and broken into colloidal fractions.

As this solubilization occurs, the oxidized lignite begins to exhibit fluid loss control properties. As the pH is increased to 9-10 (alkaline lignite in water), an optimum reduction in fluid loss will occur. The filtrate is extremely black in color at this point, and this indicates increased solubility.

If an increase in pH continues above this range, the oxidized lignite becomes more soluble and peptized even further. Filtrate volume will begin to increase at this point because of the increased solubility. Figure 1 (on Page 2) illustrates this point. The industry generally considers a "good" drilling fluid grade lignite as having a minimum of 75% alkaline solubility. However, a standard test to determine this solubility has not been agreed upon.

Because of its carboxylic acid functionality, oxidized lignites are either not soluble or will be precipitated in the presence of multi-valent ions such as calcium, magnesium, iron, etc. Generally, oxidized lignites are not used in the presence of high concentrations of these ions. The one exception is the limited use of "pre-solubilized" lignite in lime muds.

Also because of its structure, oxidized lignites are generally limited in solubility in high electrolyte systems such as saturated salts, seawater, etc. This limitation on solubility generally reduces the effectiveness of lignite as a fluid loss additive in these systems.

Oxidized lignites have proven extremely cost effective as the primary fluid loss additive in high-temperature (450°F) water base mud systems. These systems are specially designed to minimize multi-valent ions. They generally require high concentrations of lignite for good filtration control.

These systems sometime require rheological control additives to minimize viscosity/gel problems. In order to overcome some

of the solubility limitations in water base muds, many different derivatives of lignite have been offered. Only a few of these special derivatives have survived the test of time in the market place. Most of these are considerably more expensive than the standard oxidized lignite product.

Although water soluble lignites or humates have some dispersing qualities, they are relatively poor dispersants as compared to lignosulfonates or the newer low-mol weight synthetic polymers. Because of this they are used to a limited extent as fluid loss additives in certain types of non-dispersed mud systems.

enventives has specialized in the development, manufacture and marketing of lignite derivatives used as fluid loss additives in both water and oil base systems. The company holds a number of patents in this product area. When you have need for innovative solutions, why not call on us? Ven-Rez II™ is our most popular water based mud conditioner and fluid loss additive.

Ven-Rez II™ is a chemically and mechanically modified resin and lignite complex and is compatible with most water based drilling fluid systems. It is not effected by contaminants in the mud and does not increase the viscosity of the mud.

It maintains its conditioning and fluid loss properties over the range of drilling fluid densities. Ven-Rez II™ aids in shale stabilization, improves filter cake quality and reduces sticking by providing some lubricity to the wall cake. Ven-Rez II aids in stabilizing the rheological properties of you

waterbased drilling fluid.

Ven-Rez II™ provides higher temperature stability than starches or polymers and does not soften or melt like asphalt and gilsonite products.

Ven-Rez I™ is a chemically and mechanically modified resin and lignite complex with the addition of potassium ions for increased shale stabilization properties and the conditioning and HTHP fluid loss benefits of Ven-Rez II™.

Ven-Alk™ is our causticized lignite mud conditioner for rheology and filtration control in water-based drilling fluids. Ven-Alk™ aides in maintaining a constant pH and is designed to stabilize water based drilling fluids exposed to high temperature and contaminants. Ven-Alk™ will act as a mud thinner. It is especially effective in high temperature systems and in dispersed systems and a companion additive to lignosulfonate.

Ven-K™ is our potassium lignite offering for rheology and filtration control in waterbased drilling fluids. It was designed for use in potassium drilling fluids. Ven-K™ contributes the potassium ion to a mud system for the stabilization of water sensitive shales. Ven-K™ aids in controlling temperature stability of muds by reducing flocculation and gelation and improves the rheology of the fluid system.

Ven-K™ acts as both a dispersant and fluid loss control agent in HTHP drilling. It will maintain its effectiveness over a wide pH range in either fresh or salt water mud systems



## Specialty Products

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At enventives, LLC our dedication to continual improvement and our desire to provide our customers with unique solutions and the highest performance products available have enabled us to develop and offer many specialty products. Some of these products are a natural evolution from the research and development of our other products. Some have been special product solutions requested by customers or the industry. Some are the result of creative minds at work in the enventives, LLC laboratories. All are a result of our passion for the technologies we have developed, studied and strive to continually enhance through technological advancements.





enventives has additional specialty products available and offers our expertise and experience in customizing products to suit our customers specialty chemical and drilling fluid system needs.

We are available to discuss custom blends, custom formulations, toll processing and new, old or current product research and development projects. Our team of dedicated professionals have provided products and solutions to our world wide customer base.

Call enventives today to find out how we can help you improve your drilling fluid program with solutions customized to your problems, not everyone's.

Premium products with the ability to customize to solve customers specific issues is just what we do.

Products	Water Based Fluid	Oil Based Fluid	Synthetic Based Fluid	Fluid Loss Reducer	Seepage Loss Additive	Loss Circulation	Specialty
Ven-Chem 215		○	○	○			
Ven-Chem 208		○	○	○			
Ven-Chem 222		○	○	○			
Ven-BHC	○						○
Ven-BHC HT	○						○
Quick Squeeze	○	○	○			○	
Remedy	○	○	○			○	
Remedy SC	○	○	○			○	
Ven-Fyber 201		○	○		○		
Ven-Fyber SC	○	○	○		○	○	
Ven-Fyber Seal	○	○	○		○	○	
Delta P	○			○	○	○	
Ven-Rez I	○			○			
Ven-Rez II	○			○			
Ven-Alk	○			○			
Ven-K	○			○			
Ven-Trol 401		○	○		○		
Ven-Lube I	○						
Ven-Lube II	○				○		
Ven-Sweep	○				○	○	
Ven-Pel I	○	○	○			○	
Ven-Pel II	○	○	○			○	
Ven-Block						○	○
Ven-Xtend							○
Ven-Break 15							○
Ven-Break HT							○
Ven-Plug / Ven Plex						○	○

# PRODUCTS

## Ven-BHC™

Ven-BHC™ is a proprietary poly-hydroxy silicate technology designed for waterbased drilling, milling and completion fluids. Ven-BHC™ provides borehole stability and superior hole cleaning for milling of casing and drilling highly deviated or horizontal sections as well as straight hole drilling applications.

## Ven-BHC HT™

Ven-BHC HT™ is a proprietary poly-hydroxy silicate technology designed for waterbased drilling, milling and completion fluids. Ven-BHC HT™ provides borehole stability and superior hole cleaning for milling of casing and drilling highly deviated or horizontal sections as well as straight hole drilling applications. (High Temperature).

## Ven-Chem 215™

Ven-Chem 215 is an oil-dispersible, organophilic lignite additive designed for effective filtration control in oil base and invert emulsion drilling fluid systems. Does not contain asphalt or asphalt derivatives.

## Ven-Chem 208™

Ven-Chem 208 is an oil-dispersible, powdered organophilic lignite additive designed for effective filtration control in oil base and invert emulsion mud systems. Does not contain asphalt or asphalt derivatives. Lower cost alternative to Ven-Chem 222.

## Ven-Chem 222™

Ven-Chem 222 is a high performance fluid loss additive based on chemically modified, organophilic lignite. More suited for higher temperature oil based mud systems. Does not contain asphalt or asphalt

## Ven-Lube I™

Ven-Lube I™ is a nonpolluting drilling fluid lubricant and shale control additive for water base mud systems. Ven-Lube I™ is based on a biodegradable vegetable oil. It is non-fluorescing and will not interfere with core and cutting analysis. Ven-Lube I™ is readily dispersible in water.

## Ven-Lube II™

Ven-Lube II™ is a nonpolluting, solid, drilling fluid fiber additive for use in oil and water base mud systems. It is based on a special, environmentally safe lubricant that has been pre-absorbed on micronized cellulose fibers.

# PRODUCTS

## Quick-Squeeze™

Ven-Squeeze has been developed as an improved solution for severe to complete loss of returns. Ven-Squeeze has been specifically developed to produce a hardenable slurry designed to be squeezed into down-hole loss zones.

## Ven-Fyber 201™

Ven-Fyber 201 is a micronized, surface modified, cellulose derivative. Ven-Fyber 201 is designed to prevent seepage loss in conventional oil muds. It is also an effective seepage loss additive in most water base muds. Ven-Fyber 201 will preferentially oil wet rather than water wet.

## Ven-Fyber SC™

Ven-Fyber SC™ has been formulated to rapidly provide a stress cage fracture seal and prevent seepage losses while drilling. Ven-Fyber SC™ is designed to increase hoop stress in the near wellbore formation. Ven-Fyber SC™ is a blend of micronized, surface modified, cellulose derivatives combined with specifically sized and typed organic particles.

## Remedy™

Remedy™ is an improved single sack solution for partial to severe loss of returns. Remedy™ is engineered to provide a precise variation of particle types and sizes that maximize the sealing of formations prone to loss circulation. Remedy™ may be utilized in Oil-based and Synthetic-based fluid systems as well as Waterbased fluid application

## Remedy SC™

Remedy SC™ was designed to rapidly provide a stress cage fracture seal and prevent losses while drilling. Remedy SC™ provides a wide PSD (particle size distribution) that provides a matrix of particles to produce a quick and precise fracture sealing material that will protect your formation from fluid invasion.

## Ven-Fyber Seal™

A blend of micronized cellulose fibers specifically designed to seal depleted sands. Compatible with water, oil, and /or synthetic base muds. Ven-Fyber™ Seal prevents differential sticking, cures seepage and complete mud loss. Available in Coarse, Medium, and Fine grades.

## Delta P™

Delta "P"™ is a polysaccharide complex designed to reduce seepage loss in low pressure, depleted sands during drilling, workover and completion operations. A low cost/ high performance companion product to Ven-Fyber 201™. It is primarily designed to control seepage loss in water base fluids. However, it can be used in oil muds.

## Ven-Sweep™

Ven-Sweep has been developed as a safe and effective alternate to expensive polymer sweeps and is an improved solution for optimal Bore Hole cleaning and removal of cuttings and debris. Excellent results have been seen in the form of pump pressures returning to normal, unloading of cuttings, removal of casing shavings, float collar fragments and other well bore debris.



FlexRig  
431

# PRODUCTS

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## Ven-Rez I™

Ven-Rez I™ is based on our lignite derived resin technology. It is compatible with most water based drilling mud additives and has been designed with the inclusion of the potassium ion. Ven-Rez I™ is a chrome-free lignite derivative designed to provide improved filtration control and stabilize rheological properties in high temperature water base muds.

## Ven-Rez II™

Ven-Rez II™ is based on a new lignite derived resin. It is compatible with most water based drilling mud additives. Ven-Rez II™ is a chrome-free lignite derivative designed to provide improved filtration control and stabilize rheological properties in high temperature water base muds.

## Ven-Trol 401™

Ven-Trol 401™ is a multipurpose drilling fluid additive designed to stabilize shale, prevent cuttings dispersion and provide lubricity in both water and oil base muds.

## Ven-Alk™

Ven-Alk™ is a highly efficient, multi-purpose mud conditioner for water base muds. Compatible with most chemicals used in water based drilling fluids.

## Ven-K™

Ven-K™ is a highly efficient, multipurpose mud conditioner for water base muds. Ven-K™ is primarily used as a fluid loss additive and shale control additive in potassium base shale control systems.

## Ven-Pel I & II™

Ven-Pel I & II™ are different types of densified fibrous lost circulation materials designed to expand up to 5 times their volume when in contact with water. Ven-Pel I & II™ are used in waterbased drilling fluids to prevent or overcome lost circulation. Ideally suited for use in porous gravel, fractured formations and vugular cavernous strata.fluids.

## Ven-Xtend™

Ven-Xtend™ may be used to extend the pumping times of Ven-Block™ in fresh water, sea water, and sodium or potassium chloride brines.

## Ven-Break™ 15

Ven-Break™ 15 is a specially formulated, non-oxidizing, enzyme-based breaker for use with various types of polymer-based materials such as Ven-Block™. Ven-Break™ 15 chemically degrades the large polymer molecules to low weight polymers and simple sugars and breaks polymer plugs back to a flowable liquid.

## Ven-Break™ HT

Ven-Break™ HT is a specially formulated, inorganic breaker for use with various types of polymer-based materials such as Ven-Block™. Ven-Break™ HT is designed to work at higher formation temperatures where the activity of enzyme based breakers would be destroyed. Ven-Break™ HT chemically degrades the large polymer molecules to low weight polymers and simple sugars and breaks polymer plugs back to a flowable liquid.

## Ven Plug™/Ven Plex™

Ven-Plug™ is a highly viscous temporary plugging agent in severe cases of lost circulation. It is also effective as a top hole drilling fluid and as a hole sweep. It should be used in conjunction with Ven-Plex II™.

## Ven-Block™

Ven-Block™ is a blend of special organic polymers and auxiliary complexing chemicals. The blended product forms a time-delayed, self-complexing plug.

# PRODUCTS

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## Aphron ICS™

Our Aphron Invasion Control System™ is an at balance fluid system that is solids free, incorporating microbubbles under pneumatic pressure for invasion control. Our Aphron ICS™ has a finely tuned rheology engineered for minimal fluid loss, superior hole cleaning and excellent borehole stability.

## ActiGuard™

ActiGuard™ is a proprietary blend of surfactants and vegetable based oils utilised for the control of swelling and sloughing shales. ActiGuard™ is a key component of our Aphron ICS™ fluid technology.

## BlueStreak™

BlueStreak™ Mud Conditioner is a multi-component blend of anionic and nonionic surfactants and co-surfactants in an aqueous solution. BlueStreak™ works well in all types of water base drilling fluids and is a key component of our Aphron ICS™ fluid technology.

## GoDevil II™

GoDevil II™ is a blend of non-ionic polymers which provide low shear rate viscosity (LSVR) in drilling fluid systems. GoDevil II™ works well in all types of water base drilling fluids and is a key component of our Aphron ICS™ fluid technology.

## ActiVator I™

ActiVator I™ is a unique additive designed to be added to certain types of biopolymer-containing fluids to enhance their thermal stability. ActiVator I™ is particularly effective in the thermal enhancement of low-shear-rate-viscosity fluids.

## ActiVator II™

ActiVator II™ is a thermal stabilizer for drilling fluids viscosified with polysaccharide polymers such as natural gums, cellulose derivatives, and biopolymers.

## Aphronizer A™

Aphronizer A™ is a concentrated surfactant that enhances the shell strength of aphron micro-bubbles.

## Aphronizer B™

Aphronizer B™ is a specially design polyvinyl alcohol additive for enhanced AphronICS™ fluids to yield enhanced aphron shell malleability.

## TriCon HT™

TriCon HT™ is a proprietary blend of synthetic and natural polymers coupled with stabilizers that are designed to enhance the thermal stability and high temperature fluid loss control of water based fluid systems.

## PassiVator I™

PassiVator I™ is a water base mud defoamer. It has been specifically designed for use in a new concept for treating potential foaming problems in aphron containing water-base fluids.



## PolyPhron ICS™

PolyPhronICS™ is used under numerous field conditions to reduce or completely eliminate the need for conventional lost circulation materials. This feature is thought to result from several mechanisms. One is the significant increase in low-shear rate viscosity that occurs. The second mechanism is the expansion of the bubbles to a size that effectively air-locks fluids in a porous formation. A third mechanism is the potential, instantaneous lowering of fluid density on a micro-environmental basis as bubble expansion takes place during the loss to the formation.

## PolyMul™

PolyMul™ is a novel, non-aqueous emulsifier. It has been specifically designed for use in PolyPhronICS™. PolyMul™ works well in most oils, synthetics, oil base muds (OBM), and synthetic base muds (SBM).

## PolyQ™

PolyQ™ is a specialized Mud Conditioner designed as an LSRV Booster and Aphron bubble enhancer for the PolyphronICS™. PolyQ™ is specifically designed to enhance viscosity and stabilize the aphrons in the PolyphronICS™.

## PolyVis™

PolyVis™ is a primary rheology additive that provides low shear rate viscosity (LSRV) in non-aqueous drilling, workover, and completion fluid systems. When mixed with oils or oil base muds, it provides hole cleaning, solids suspension, and formation invasion control.

## PolyWet™

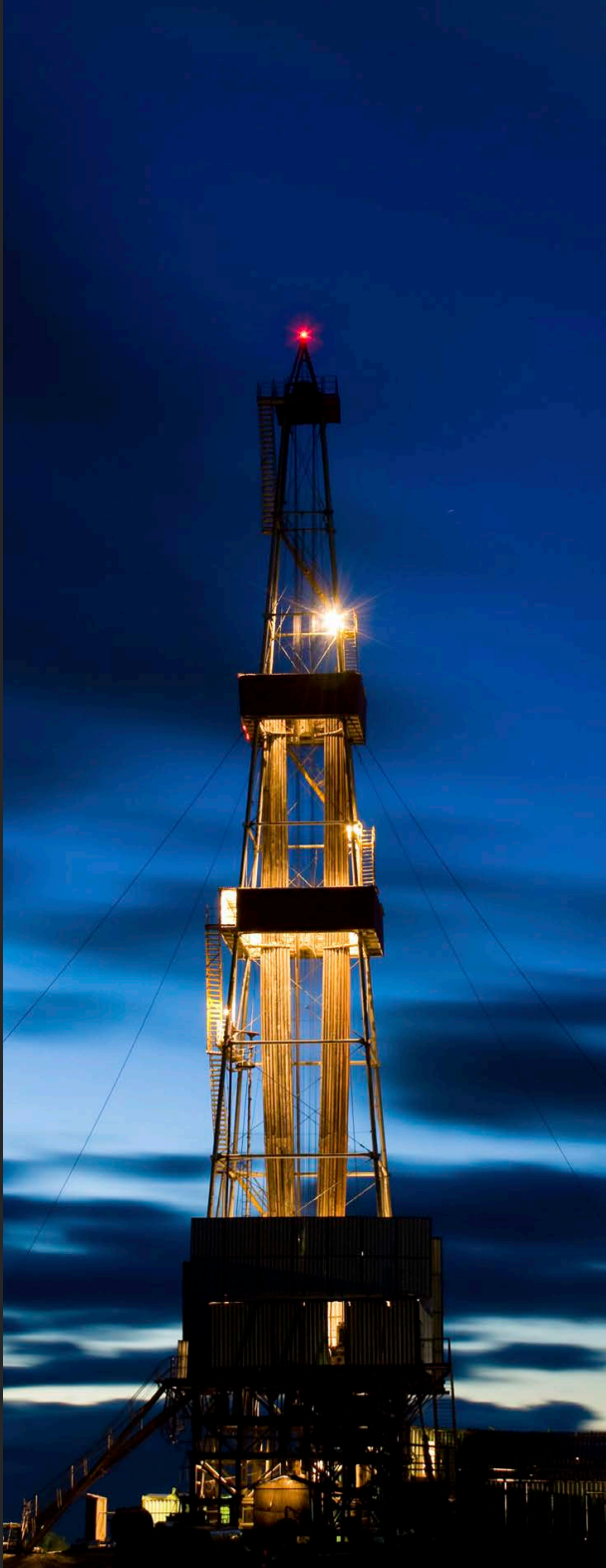
PolyWet™ is a oil wetting agent specifically designed for use in the PolyPhronICS™ oil-based Drilling Fluids. When mixed with diesel, Mo or IO base fluids, PolyWet™ is completely soluble and acts to coat oil wet surfaces. PolyWet™ also serves as a general dispersant for non-oil wet solids, LCM and additives that require oil wetting for use in oil-based fluids.

## Tri-Vis cP+™

Tri-Vis cP+™ is a rheological modifier which enhances low shear rate viscosity (LSRV) in drilling, workover, and completion fluid systems. Tri-Vis cP+™ is normally used as an adjunct to PolyVis™. When mixed with oils or oil base muds, it functions to stabilize Polyphrons.

## MicroDyne L™

MicroDyne L™ is a novel, non-aqueous fluid conditioner. It has been specifically designed for enhancing the formation of the Polyphrons (Aphrons) in non-aqueous fluids. It is used in a new concept for treating various losses of fluids from non-aqueous fluid systems. MicroDyne L™ works well in most oils, synthetics, oil base muds (OBM), and synthetic base muds (SBM).



## Innovative Drilling Fluid Additives

Proven in the Field for 30+ Years

## Premium & Low Cost Loss Circulation Materials

Field Proven Proprietary Formulations

## Organophilic & Modified Lignite Products

HTHP Fluid Loss Additives for Oil, Water & Synthetics

## AphronICS™

Patented micro-bubble Invasion Control System

## Ven-BHC™

Low-Cost & Superior Replacement for MMO/MMH Drilling Systems

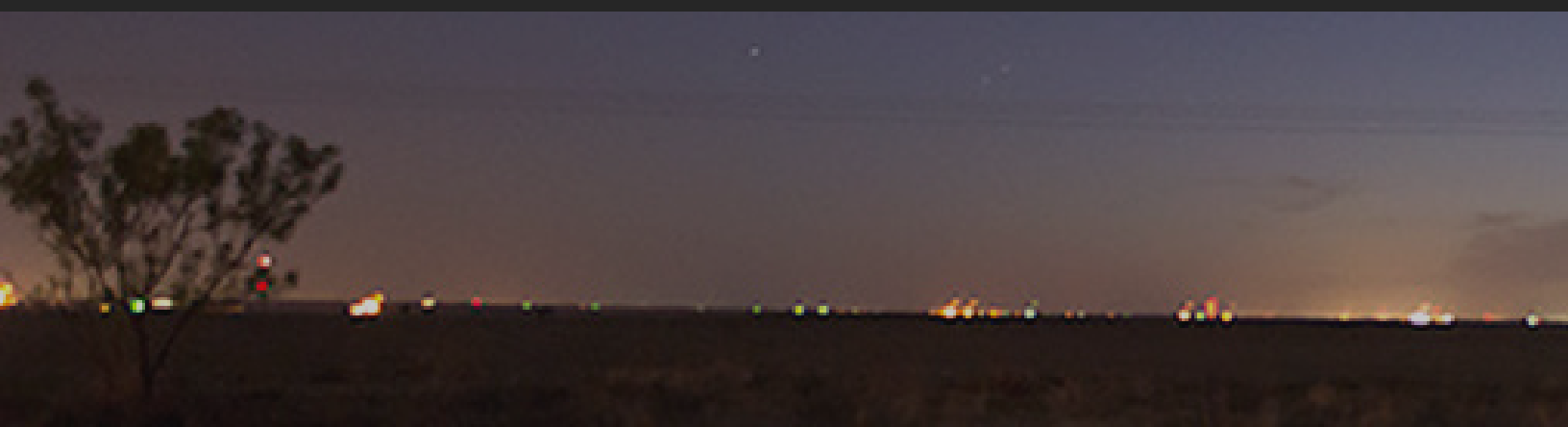
## Private Label & Real Custom Blends

## Lubricant Technologies

## Research & Development Services

## Full Lab Capabilities

Permian Basin Logistics (Rail, Warehousing, Storage & Yard)





**enventives**

## PRICE QUOTES

Please contact enventives, LLC or your local enventives distributor for current availability and to obtain current price quotes.

## PRODUCT DATA INFORMATION

The information presented herein is based on the best data available and is believed to be correct. However, nothing stated in this information is to be taken as warranty, expressed or implied, regarding the accuracy of the information or the use of our product; nor shall anything contained herein be construed to constitute a permission or recommendation to practice any invention covered by patent or patent application, or know-how owned by enventives, LLC, any of its divisions, or by others, without a license by the owner of the patent, patent application, or know-how.



# enventives

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