



## **EVERY YEAR LOSS CIRCULATION COSTS THE OIL & GAS INDUSTRY OVER \$1 BILLION.**

As an oil company drilling engineer or mud company operations manager, you face some significant hurdles when it comes to loss circulation.

The problem today is that the market is cluttered with too many suppliers & too many products. As a result, confusing pricing structures with no correlation to quality or performance create unnecessary headaches and wasted spending.

We believe that selecting, procuring, and implementing Loss Circulation Material into your drilling program shouldn't be difficult.

But several misconceptions can lead you down the wrong path when choosing the appropriate procedures and products for the most efficient wellbore stability and loss circulation contingency plans.

#### These misconceptions are:

- 1. All LCM's are the same
- 2. You get what you pay for
- 3. Remediation is less expensive than prevention
- 4. LCM's are "pour and pump"
- 5. LCM's will cover up poor drilling practices

The good news is that running over project budgets and increases in Non-Productive Time due to loss circulation are avoidable.

With some good planning, robust tracking, and an engaged, supportive partner, you can keep your drilling projects on budget, on time, and hassle-free every time.









# MISCONCEPTION #1: ALL LCM'S ARE THE SAME

Not all LCM products are the same. In fact, some products can do as much harm as they do good.

Quality products seal the formation with little to no formation damage, whereas inferior products can promote losses and formation damage requiring additional cost and effort to control.

### For example:

- Many LCM choices are a single material with a limited (narrow) particle size distribution.
- Some common choices can cause formation issues when not used properly:
  - Calcium carbonate is a popular product used as an LCM, but overtreatments can cause ECD (circulation) issues that increase whole fluid losses and formation damage.
- · Cedar fiber, another popular choice, can cause inconsistencies in fluid flow properties, resulting in hole swabbing, leading to whole fluid losses and formation damage.

 Look for LCM products designed with multiple fiber & particle types and a broad particle size distribution to maximize the bridging and matting effects necessary to seal troublesome formations, preventing formation damage AND reducing whole fluid lost to the formation.



**GENUINE () ENVENTIVES SOLUTIONS** 



## **MISCONCEPTION #2:** YOU GET WHAT YOU PAY FOR

Unfortunately, LCM's with higher costs do not always correlate to better performance or greater effectiveness. Sadly, the more significant driver in pricing isn't usually product quality or performance but the size of an LCM company's sales and marketing budget.

Many LCM providers are not manufacturers but purchase their products from wholesale manufacturers or toll blenders for resale. Some even purchase other manufactured products and blend those for resale.

This all leads to multiple "middlemen" and margin stacking. Unfortunately, those added costs are passed on to you.

 Look for a supplier and partner who is a wholesale manufacturer that can provide Premium LCM products to operators thru their preferred service companies at fair pricing. This allows the service provider and the manufacturer acceptable margins without severely hiking the operator prices.



GENUINE 🔝 ENVENTIVES SOLUTIONS



## **MISCONCEPTION #3:** REMEDIATION IS LESS EXPENSIVE THAN PREVENTION

A loss circulation program that includes planning and preventative maintenance will provide a more cost-effective drilling fluid program than one that relies on remediation as the means to contain losses.

Preventative measures to loss circulation have several benefits and are often more successful than remediation measures.

Prevention can save a great amount of Non-Productive Time caused by extended remediation measures.

Once the formation has been fractured it can cause continuous problems with drilling and cementing operations until the interval is cased off.



## PRO TIP.

- · Look for a partner who can provide a program that addresses preventative treatments and procedures for early remediation of losses to keep minor problems from becoming severe issues.
- Preventative measures, like active system background treatments of a Premium Seepage Loss additive, can help reduce differential sticking and form strong, thin filter cakes and minimize the downtimes associated with wellbore instability and formation damage control.





**GENUINE () ENVENTIVES SOLUTIONS** 







Dumping large amounts of LCM downhole may be good for some people's business (other than the operator), but it is rarely the most economical practice.

Product costs plus the increased cost of transportation and the logistics hurdles of procuring low-cost LCM's make this a poor choice for your drilling program.

Following a Wellbore Stability Program and using LCM products correctly allows maximum performance and efficiency.

## PRO TIP.

- · Having a plan and following a plan is the first part of an excellent loss circulation program. Being able to identify loss circulation at its earliest points can save considerable amounts of time and dollars.
- Next, work with a partner who can review your results and share "lessons learned" to ensure continuous improvement and optimization of your drilling program.



**GENUINE () ENVENTIVES SOLUTIONS** 



## **MISCONCEPTION #5:** CM'S WILL COVER UP POOR DRILLING PRACTICES

## No LCM will overcome the damage caused by poor drilling practices

### **Examples of poor drilling practices include:**

- Pulling drill pipe too fast causes surge and swab pressures
- Turning pumps on too fast or turning on above pressure breaks formation by high hydrostatic pressures
- Not managing your Equivalent Circulating Densities (ECDs).
- Not having good Formation Integrity Tests (FITs) allows fluid to leak back behind the casing shoe and into lower pressure formation

A good LCM can cover up losses incurred from surge and swab due to poor drilling practices, but the reality is you are not fixing the issue, just masking the problem. Poor practices will continually break the seals that are formed and cause wellbore instability and formation damage.

 Identifying and addressing these poor practices should be included in any comprehensive Wellbore Stability Program. Wellbore Stability starts with the prevention of a micro-fracture becoming a macro-fracture. This is done with proper selection of particles for proper sealing and isolation of the micro-fractures and providing the wellbore with strengthening and stress cage enhancing capabilities.



**GENUINE** A ENVENTIVES SOLUTIONS











We manufacture premium Loss Circulation Materials for Retail Mud Companies, Wholesale Distributors, and Third-Party LCM Suppliers to deliver the performance every operator is looking for and at prices that make sense for everybody involved.

Our Ven-Fyber, Delta-P, and Remedy product lines have solved Loss Circulation and Wellbore Stability problems for the last 40 years.

#### **Premium Products At Fair Prices**









WELL BORE STABILITY

#### 3 Steps to select, procure, & implement the best drilling fluid additives:

- **1. Access:** We'll take the time to understand your unique needs, so you can reduce drilling time and manage costs.
- 2. **Deliver:** We work directly with your logistics team or throughout our extensive network of qualified mud companies and reliable distributors to get you the products you need, when and where you need them.
- 3. Review: We'll review your results and share "lessons learned": to ensure continuous improvement and the optimization of your drilling program.

GENUINE 🔝 ENVENTIVES SOLUTIONS





A TRUSTED PARTNER TO HELP YOU RELAX KNOWING YOUR WELLS RUN ON SCHEDULE AND UNDER BUDGET.

- Schedule a Call
- Sales@enventives.com
- **—** 612-930-1977

## ENVENTIVES