

AMERICAN GILSONITE

Ensures wellbore stability, controls fluid loss and reduces costs with no HSE impact

Gilsonite® is the most cost-effective multifunctional additive for any type of mud.

With its unique chemical properties and physical characteristics, Gilsonite is scientifically proven to improve wellbore stability, plug micro-fractures, and bond and seal all types of formations. Multifunctional Gilsonite lowers costs by allowing you to use fewer additives.

Gilsonite is the only additive that provides all of these benefits:

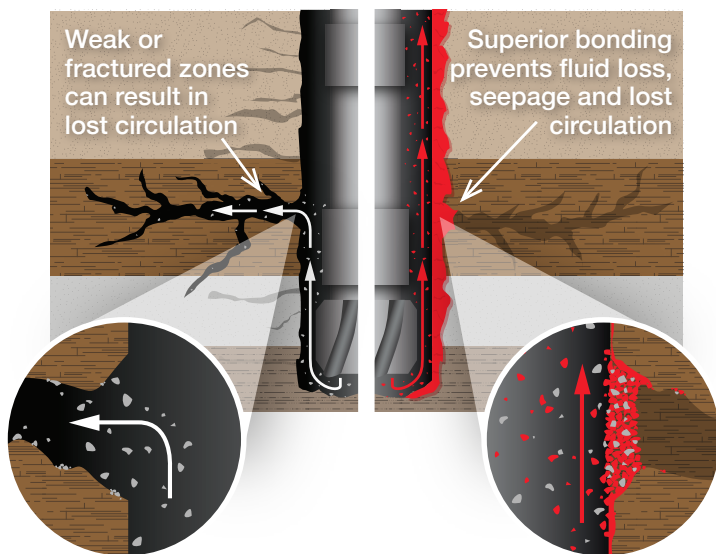
- > Controls fluid loss and seepage
- > Stabilizes shales
- > Prevents lost circulation
- > Strengthens the wellbore
- > Minimizes differential sticking
- > Performs in oil- and water-based drilling muds
- > Performs in HP/HT environments
- > Passes deepwater EPA regulations

Unique bonding and plugging properties prevent formation damage

Gilsonite forms a physical and chemical bond with permeable formations, creating an effective seal to prevent the passage of drilling fluid. By uniquely functioning as both a malleable and solid plugging agent, Gilsonite controls fluid loss and seepage, prevents lost circulation and protects reactive and low-reactive shale surfaces, even at elevated bottomhole temperatures.

Without Gilsonite

With Gilsonite



Proven to strengthen the wellbore

HP/HT wells, shales and underpressured zones require specialized drilling fluids and wellbore-strengthening techniques. Adding Gilsonite to an OBM or WBM strengthens the well by:

- > Reducing pore pressure transmission and sealing micro-fractures in shale and low-porosity sands
- > Keeping interbedding formations intact
- > Developing effective filter cake
- > Providing a “smear effect” that creates a continuous protective sealant along the wellbore wall

The most effective additive to prevent differential sticking

Gilsonite minimizes the occurrence of stuck pipe and stuck logging tools by thoroughly sealing permeable formations – even in zones with a highly overbalanced pressure differential – and improving filter cake lubricity.

American Gilsonite products perform in any application

Product	Softening Points	Mud Type
Gilsonite XM-P	>325° F	OBM
Gilsonite LM-P	>350° F	OBM
Gilsonite GM-P	>350° F	OBM
Gilsonite HT Series	400-500° F	OBM
Gilsonite AquaSol Series	325-500° F	WBM

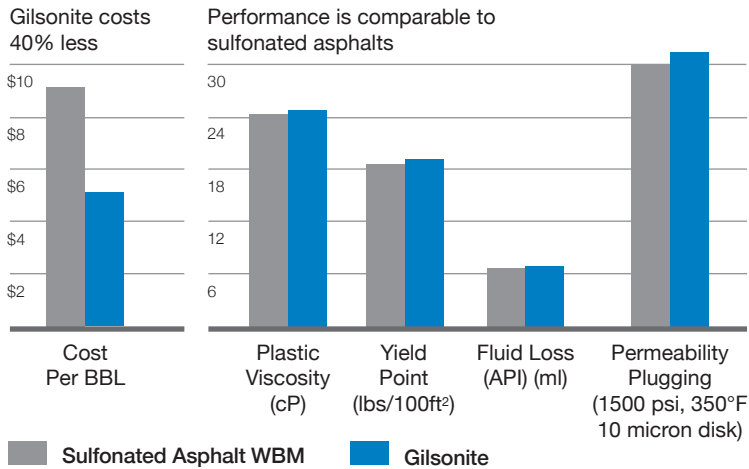
Gilsonite has overwhelming performance advantages over alternatives

	Cost-effective	High Temperature	Controls Fluid Loss	Minimizes Differential Sticking	Stabilizes Wellbore	Non-Clumping	Strengthens Wellbore	Smear Effect	Coats & Bonds	Minimal Odor
GILSONITE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lignite	✓	✓	✓	X	X	✓	X	X	X	✓
Oxidized / Sulfonated Asphalts	X	X	✓	X	✓	X	✓	✓	X	X
Bitumen	✓	X	✓	X	X	X	X	✓	X	X
Petroleum Coke	✓	✓	✓	X	X	✓	X	X	X	X
Coal	✓	X	✓	X	X	✓	X	X	X	X
Grahamite	X	✓	✓	✓	X	✓	✓	✓	X	✓
Glance Pitch	✓	X	✓	✓	✓	✓	X	✓	X	X

Gilsonite offers significant cost advantages in both OBM and WBM applications

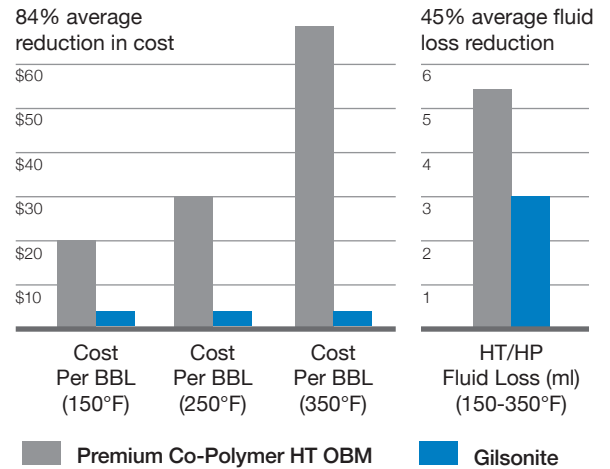
Water-Based Mud Applications:

Gilsonite is comparable to sulfonated asphalts, but priced 40% less.



Oil-Based Mud Applications:

Gilsonite reduces fluid loss at a fraction of the price.



Gilsonite is naturally better®

Gilsonite is a naturally occurring asphalt-like solid hydrocarbon rock (uintaite) found only in northeastern Utah. Gilsonite has significant health advantages over synthetic products.

- > Gilsonite is:
 - Non-toxic (unlike coal or fly ash)
 - Non-carcinogenic
 - Non-mutagenic
- > No extreme safety measures are needed to handle Gilsonite
- > Passes Gulf of Mexico EPA discharge requirements for deepwater operations

Proven in more than 60 years of oilfield performance

The effectiveness of Gilsonite as a versatile additive has been documented in over 50 SPE and other peer-reviewed presentations.



There's only one source of Gilsonite. **Proven under pressure.®**

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