

# AMERICAN GILSONITE

Extends slurry yield, reduces density, and immediately lowers cost

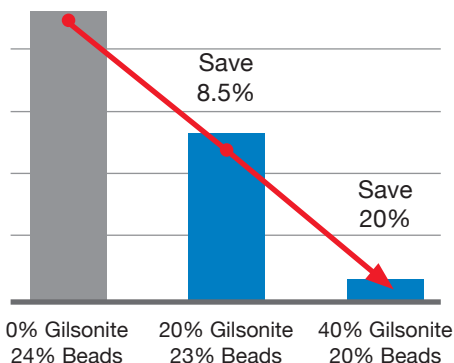
## Gilsonite crushes the high cost of hollow beads

Gilsonite® is not just for lost circulation, it's an effective slurry extender. Compared to hollow beads, Gilsonite is crush-proof and cost-effective.

### Add Gilsonite and save more than 20%

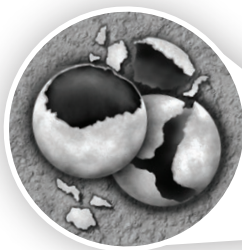
Commonly used hollow beads are significantly more expensive than Gilsonite. Field experience has shown that you can reduce costs dramatically by adding Gilsonite to replace beads. And you keep the **low density** with good **compressive strength** and much-needed mechanical properties.

Savings per cubic foot in 10.0 ppg slurry



### Crushed beads compromise your wellbore integrity

Downhole pressure and even the wellsite mixing process can destroy hollow beads. When the beads don't survive, your cement design – along with wellbore integrity – is compromised. Crushed beads can cause increased slurry density and viscosity, decreased volume and premature dehydration. Those hollow beads may be costing more than you think.



Gilsonite immediately reduces costs and enhances wellbore integrity

## Gilsonite enhances wellbore integrity

With a number of unique chemical properties and physical characteristics, Gilsonite is the ideal multi-functional cementing additive for simple to complex wellbore configurations.

### Cement slurry benefits

- > Increases yield
- > Reduces slurry weight
- > Controls free water
- > Lowers slurry water ratio
- > Promotes favorable rheologies resulting in lower ECDs
- > Prevents lost circulation
- > Scours wellbore/enhances mud removal

### Set cement benefits

- > Supports compressive strength development
- > Increases flexibility
- > Reduces cracking
- > Heals microfissures
- > Reduces permeability
- > Strengthens bond to the formation and the casing
- > Reduces environmental risk

## Gilsonite reduces costs immediately and over the life of the well

Adding Gilsonite is a cost-effective way to decrease slurry density, maintain compressive strength and assure a long-lasting cementing job.

Composition (163°F, 10.0 lb/gal density)	Yield (cft/sk)	Water Required (gal/sk)	Free Water (%)	Slurry Cost Savings*
Portland Cement Class H + 25% hollow beads + 0% Gilsonite	2.55	8.79	Trace	0%
Portland Cement Class H + 23% hollow beads + 20% Gilsonite	2.89	9.753	Trace	8.5%
Portland Cement Class H + 20% hollow beads + 40% Gilsonite	3.30	11.54	Trace	20%

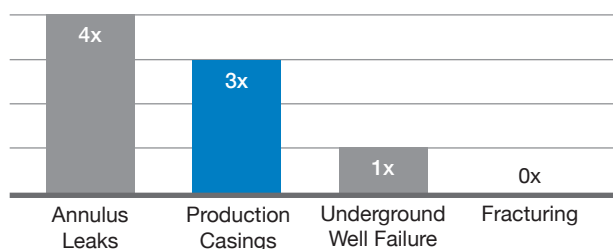
Compressive strength of all slurries exceeds Texas Railroad Commission regulatory requirements

\*Based on estimated product cost

## The quality of the cementing job is critical to wellbore integrity

The *National Academy of Sciences Journal* determined that well integrity problems were the predominant cause for fugitive gases. Gilsonite assures zonal isolation and wellbore integrity.

### Sources of Fugitive Gases



## Proven in more than 60 years of oilfield performance

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

## Proven Under Pressure®

