



INTRODUCING SLICKFIX

SlickFix is an innovative solution designed to enhance oil and gas production, allowing wells to achieve peak production throughout their entire asset life cycle.

SlickFix does this by solving a problem that has plagued slick water fracturing operations for years – gummy bears.

Normally during fracking, a sand and water mixture is pumped down a well to create and propagate fractures.

In slick water fracs, chemicals including long string polymers are added to the water to place the job. These polymers combine with particulates and divalent leechates to form polymer scale.

Adding SlickFix prevents polymer scale from forming in two ways:

- → First, SlickFix combines with divalent ions before polymers preventing formation of solids.
- → Second, SlickFix cuts up the polymers into smaller fragments which can be more easily produced and do not clog or restrict flow.





The polymer scale manifests itself in three main ways:



1. Emulsions



2. Gummy Bears



3. Restricted Downhole Flow





Reducing BS&W allowing less production chemical required to achieve sales quality oil



Eliminates damage left behind by friction reducers improving downhole permeability



Maximizes oil and gas production



Reduces emulsion tendencies



Increasing water reusability while reducing disposal costs and facility maintenance downtime improves water quality



Allows wells to achieve peak **production** throughout the entire asset life cycle

CASE STUDY:

NIOBRARA

An eight well Niobrara pad was completed with four wells treated using SlickFix and four wells untreated.

The geology was as similar as possible throughout the formation and the well design and treatments were identical. The outer wells were unbounded in all directions. Opposite corners of the formation were treated with SlickFix to directly compare the North and South wells, as well as the bounded inner wells and unbounded outer wells. To date, the wells have been in production for five months.

Oil Production	SlickFix	Untreated	70/
Total	391,225	366,166	7%
Difference	25,059 (bbl)		Difference

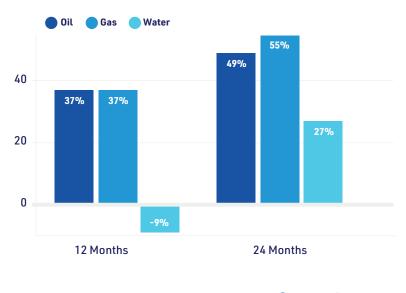
Gas Production	SlickFix	Untreated	1 50/
Total	551,269	479,468	15%
Difference	71,801 (McF)		Difference

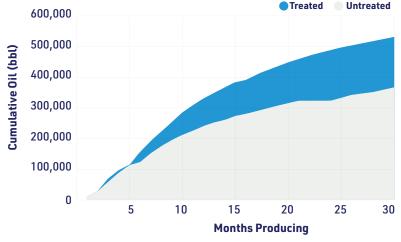
The wells treated with SlickFix have produced 7% more oil and 15% more gas.

CASE STUDY:

POWDER RIVER TURNER WELLS

Notice the SlickFix difference between two Turner wells in Powder River. The well schematics, geology, drilling and completions design of both wells were otherwise identical.









One well was treated with SlickFix and the other was untreated.

CASE STUDY:

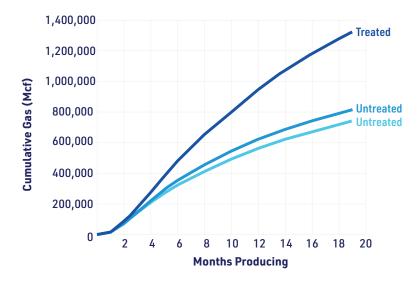
DJ BASIN NIOBRARA WELLS

Three Niobrara wells were compared in the DJ Basin. The well schematics, geology, drilling and compilations design of both wells were otherwise identical.

Production increase

17 months

26% 75% 26% Water







One well was treated with SlickFix and the others were untreated.

In 17 months, gas production increased by 75%. The treated well also had 26% increased oil production.

SlickFix is an innovative solution designed to enhance oil and gas production, allowing wells to achieve peak production throughout their entire asset life cycle.

SECURE.CA/SlickFix



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