**Current Asphaltene Treatment Method**

» Limited Zonal Coverage
» Marginal Damage Removal
» Consecutive Treatment Effect Dropoff
» Consecutively Diminished Treatment Effect

Traditional asphaltene treatments typically consist of pumping xylene at high rate into a damaged well. Xylene heats up downhole and quickly breaks apart plugging asphaltene clusters.

The heated xylene is so successful at breaking apart these clusters that it disintegrates the first cluster that it contacts and causes such a large increase in permeability that the entire treatment penetrates a very limited portion of the zone.

As the xylene is flowed back, these separated asphaltenes will begin to recluster and have a plugging effect in the wellbore and screen, reforming the damage the system was intended to remove.

With this occurrence, damage removal and treatment life are marginal at best.

**NoPhalt™ Enhanced Treatment Method**

» Full Zonal Coverage
» Enhanced Penetration Capability
» Increased Damage Removal
» More Production Uplift
» Longer Treatment Life

NoPhalt™ is an aromatic based asphaltene removal system that can be used as a solvent, a viscoelastic gelled system, and if needed, contain slow dissolving particulate diverter.

This system allows for the solvent to continuously divert and treat the entire interval as opposed to pumping xylene at a high rate where it is only able to contact a small portion of the damaged zone. The base solvent system is supplemented with proprietary chemistry allowing for the true removal of the asphaltene deposits as opposed to pushing the asphaltenes farther into the reservoir only to return shortly after treatment.

NoPhalt™ is a multifunctional chemistry that increases penetration rates while improving zonal coverage. Novel components also absorb onto the now dispersed nanoparticle sized asphaltenes preventing them from reagglomerating into large clusters. This recovers more asphaltenes over a greater area and results in more uplift and a longer treatment life. NoPhalt™ is above and beyond the remedial ability of traditional xylene-based systems.

Don’t push the problem back, remove it with NoPhalt™.
**NoPhalt™ Viscoelastic System vs. Traditional Xylene Method**

**Asphaltenes**

- **NoPhalt™**
- **Xylene**

**Unique diversion options allow for superior zonal coverage compared to traditional solvent systems.**

Asphaltenes damaged wellbore.

**NoPhalt™** contains proprietary chemistry that better penetrates asphaltene clusters breaking them into nanometer sized pieces, disperses them, and removes them from the damaged area.

**NoPhalt™** prevents the reformation of asphaltene clusters allowing for a larger portion of asphaltene damage to be completely removed from the well and ensuring a longer treatment life.

**NoPhalt™ Viscoelastic System**

» Full Zonal Coverage
» Enhanced Penetration Capability
» Extended Treatment Life
» Increased Production Uplift
» More Efficient Damage Removal

**Traditional Xylene Method**

» Minimal Zonal Coverage
» Isolated Penetration Capability
» Short Treatment Life
» Temporary Production Uplift
» Limited Damage Removal