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Attention: Editor

October 2, 2013

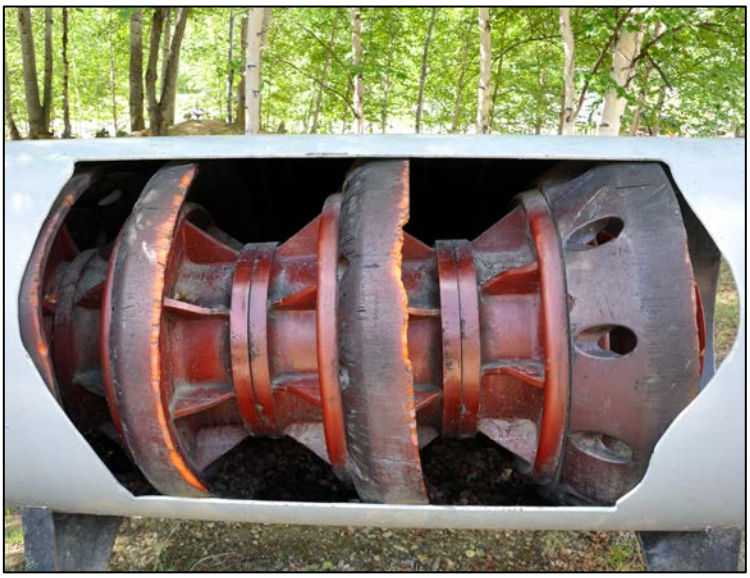
PRESS RELEASE

Don't Squeal About Corrosion Issues - Use Cortec's CorroLogic™ Systems VpCI®-639 & VpCI®-639 HFB For Hydro Testing And Pigging Of Pipelines!

CorroLogic™ Systems VpCI®-639 and VpCI®-639 HFB are oil soluble water dispersible corrosion inhibitors for multiple oil field applications.

CorroLogic™ Systems VpCI®-639 and VpCI®-639 HFB are oil soluble water dispersible corrosion inhibitors for multiple oil field applications. Formulated from specifically selected ingredients; they are designed to provide corrosion protection against severe conditions encountered in petroleum/natural gas production and processing. They are effective for a wide range of refined hydrocarbons, crudes, and oil/water ratios. As fast acting long-term corrosion inhibitors, VpCI®-639 or 639 HFB will form an effective anti-corrosion barrier for metals in the presence of water, halogens, and corrosive gases

such as dissolved oxygen, sulfur dioxide, carbon dioxide, and hydrogen sulfide. The unique chemistry of VpCI®-639 and VpCI®-639 HFB allow these products to provide excellent protection in sweet/sour (carbon dioxide or hydrogen sulfide presence) environments at very low concentrations. VpCI®-639 HFB is particularly recommended when a customer needs a product with high flash point and the ability to minimize bio-growth progress.



Side view example of Pigging in Pipeline.

Continuous protection between treatments is assured due to the solubility, dispersability in natural gas/water mixtures, and long-term water-displacing film formation. In addition, these products provide Cortec's patented Vapor phase Corrosion Inhibition (VpCI®) to protect areas that are inaccessible to direct solution contact. This unique characteristic protects internal parts during low fluid levels and combats atmospheric corrosion in production and storage tanks.

Recently, a major US pipeline company successfully used CorroLogic™ VpCI®-639 HFB, for the lay-up of transporting pipeline and corrosion protection during their hydro testing. The slug of VpCI®-639 HFB was run between two pigs to achieve full coverage of the internal surface of the pipeline. VpCI®-639 HFB provided excellent corrosion protection during hydro testing, the lay-up period following hydro testing, and it was also beneficial when the pipeline was going back into service. The preservative used in the formula suppressed bacteria usually present in pipes transporting petroleum including anaerobic sulfate reducing bacteria. The

customer appreciated the relatively low cost of application; instead of inhibiting the whole volume of the water used for hydro-testing VpCI®-639 HFB was only used in a limited amount that provided a tenacious protective film on the inner walls of the pipeline.

The results of the most recent study of this technology, "Investigation of Corrosion Protection and Thermal Stability of Corrosion Inhibitors for Processing of Associated Petroleum Gas", will be presented at NACE 2014. The study details are available upon request.

		Technology of Application	
System	**Corrosive Medium**	**Method of Application**	**Frequency of Application and Dosage**
Pipelines and collection systems for petroleum	Crude oil, emulsions, water, and/or petroleum containing CO_2 and H_2S	Injection of the inhibitor "as is"	Intermittent treatment - Add for 48 hr. period, 4 times a year at 2000 ppm or use continuous treatment at 5-15 ppm
Oil wells and equipment	Crude oil, emulsions, water, and/or petroleum containing CO_2 and H_2S	Injection of the inhibitor "as is"	Periodic injection – Add for 48 hr. at 400-800 ppm every 2-2.5 months

VpCI®-639 and VpCI®-639 HFB are REACH and RoHS compliant, and conforms to NACE Standard TM-01-77, compliant to NACE International publications 1D196, 1D192, and ASTM G-170-01, G-185-06.

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