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Corrologic™ system – solution custom engineered to fit

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Cortec® Engineering and Field Service (CEFS), developed an engineered system approach utilizing VpCI® chemistry to control corrosion and obtained significant results in the marketplace in 2012. In support of this approach, CEFS is developing its CorroLogic™ family of systems, services, and products especially designed to control corrosion in a variety of applications within the most aggressive corrosive environments such as given below.

1. CorroLogic™ system for above ground storage tanks

System of filling the interstitial spaces of double bottom above ground storage tanks (ASTs). Growing number of oil and gas companies are embracing the CorroLogic™ system approach for their ASTs. Data from the real-time corrosion rate monitoring equipment that is installed in each tank along with the VpCI®, proves the long term effectiveness of this solution. Cortec completed a pilot project for Saudi-Arabian Oil Company, Saudi Aramco, on an AST with an oil-sand tank pad at one of their critical Arabian Gulf oil export terminals, which will be presented at the NACE International Conference in 2013.

2. CorroLogic™ system for cased pipeline casings

Cortec® chemists developed a product that is applied as a liquid into the annular space between the carrier pipe and the casing and quickly sets into a gel, as well as the equipment and process for application of the product. This CorroLogic System consists of two alternatives. Options for corrosion rate monitoring are also available. Cortec® is providing the oil and gas industry with unique choices for carrier pipe corrosion control.

3. CorroLogic™ system for insulated pipe (CUI)

Corrosion under insulation (CUI) is a significant worldwide problem. CEFS is devoting significant resources in 2012 to refine the VpCI® products used to mitigate CUI in a wide variety of environments. Cortec® engineers have worked with a major manufacturer of corrosion rate monitoring systems to develop equipment capable of producing real-time measurements at the surfaces of insulated pipe as well as developing special equipment and processes for application of VpCI® chemistry. In the very near future Cortec® will be well prepared to make a huge impact on mitigation of CUI with no service disruption, no recoating and no insulation removal.

Figure 2 Cased pipeline crossings

Tim Whited, Cortec's Director of Corrosion Engineering and Field Services, noted that underground structures such as pipelines – face aggressive corrosion attack in many areas due to the presence of a high groundwater table that is very saline. According to Whited: "Most industries including oil and gas companies such as Saudi Aramco and the Adnoc group are benefiting in multiple ways from Cortec's CorroLogic™ family of systems".

CorroLogic™ products are non-toxic, nitrite and phosphate-free and are made of biodegradable materials. CorroLogic™ family of systems complies to NACE Standard RP 0487-2000 (Figure 2).

More information is available from the web site: www.cortecvci.com