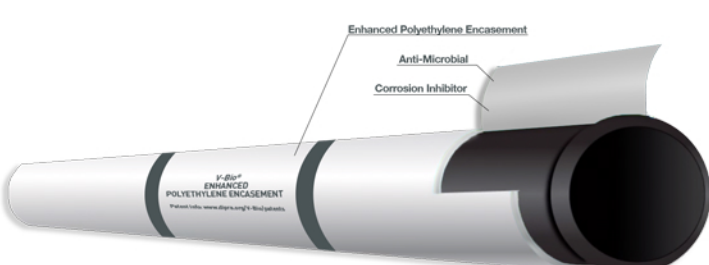




May 20, 2021  
(Updated June 5, 2023)

## The Benefits of **V-Bio<sup>®</sup> ENHANCED POLYETHYLENE ENCASEMENT** For Ductile Iron Pipe



Economical polyethylene encasement has been used as an effective method of corrosion control for Ductile iron pipe since its inception in the early 1950s, and has been protecting iron pipe within actual water systems since 1958.

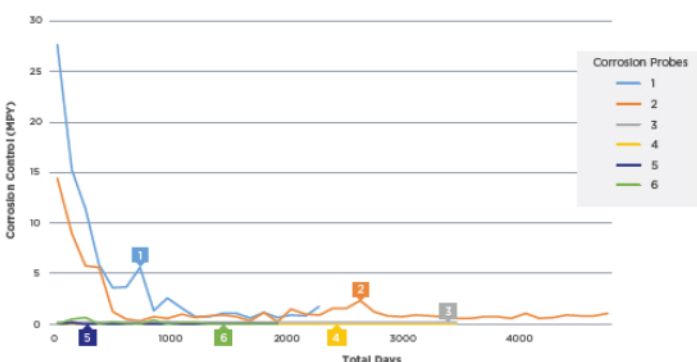
V-Bio<sup>®</sup> enhanced polyethylene encasement is a betterment of its predecessor with added “active” components. It is co-extruded to infuse an anti-microbial additive and a corrosion inhibitor into the inside surface of the film to mitigate microbiologically influenced corrosion and control galvanic corrosion, respectively.

Check Out Our  
V-Bio<sup>®</sup> Brochure



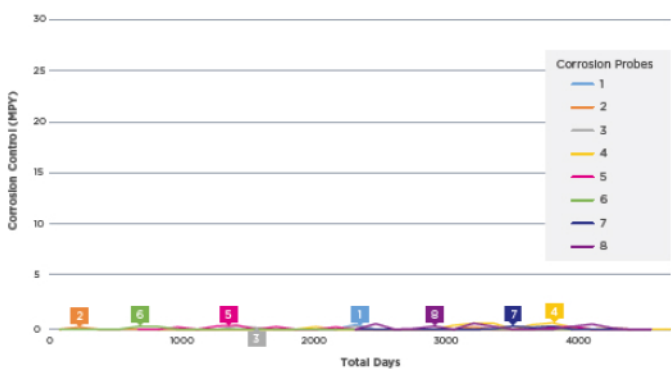
The results of corrosion probe readings placed under traditional polyethylene encasement and V-Bio<sup>®</sup> enhanced polyethylene encasement are shown below:

### Corrosion Rate (MPY) for Probes Under Polyethylene Encasement



The lower MPY readings of probes inserted under polyethylene encasement was caused by deoxygenation of the aqueous environment trapped underneath the film when the pipe was installed.

### Corrosion Rate (MPY) for Probes Under V-Bio<sup>®</sup> Enhanced Polyethylene Encasement



Corrosion rates of all probes under V-Bio<sup>®</sup> enhanced polyethylene encasement with inhibitor and anti-microbial are at or near zero MPY.

V-Bio<sup>®</sup> enhanced polyethylene encasement is a betterment to an already proven method of protecting Ductile iron pipe from aggressive soils. Read [here](#) about the impressive results from DIPRA's investigation of cast iron pipe encased in traditional polyethylene in Lafourche Parish, LA, which has some of the most aggressive soils in the country.



[Contact](#) our Regional Engineers to discuss how V-Bio<sup>®</sup> enhanced polyethylene encasement fits into the [Design Decision Model](#) when

Thank you,

Patrick Hogan  
President, DIPRA