CASE STUDY

Corrosion Protection of a Buried Pipe Casing using Zerust's Zerion® FVS Powder, & Zerion® PGH-300 & 400 Gels

Zerust® OIL & GAS
WORLDWIDE CORROSION SOLUTIONS

Project Specifics

Installation Dates
May 2023

Location
Illinois, USA

Environmental Conditions

05/16/2023	65˚F	~55%	Rainy and cloudy
05/17/2023	70˚F	~60%	Sunny and cloudy

Asset Details
Pipe Casing (18" x 14"x 90')

Vessel Construction: Buried pipe casings; pressure tested, 2 vent pipes.

Zerust Product(s) Used
Zerion® FVS Corrosion Inhibiting Powder
Zerion® PGH-300 Corrosion Inhibiting Gel
Zerion® PGH-400 Corrosion Inhibiting Gel








Problem
The client wanted corrosion protection for a buried pipe casing.

Solution Specifics
The casing was filled from the Northeast end with 5% Zerion FVS and 3.5% Zerion PGH-300 and Zerion PGH-400. A total of five (5) pails of FVS were premixed in a 1000-gal tote and circulated for desirable saturation and to ensure solution homogeneity using a trash pump. A total of 355 gallons of potable water was mixed with FVS inhibitor and injected through the casing at a flow rate of 50.40 CFS. While depositing three (3) pails of PGH-300 Gel and two (2) pails of PGH-400 Gel within the hopper and through the eductor system. Roughly, 2-gal of water was discharged from the southwest of the vent pipe.

Results
For the duration of the corrosion inhibitor FVS/Gel injection, no obvious leakage was observed around the end seals. VCI/Gel injection was completed per the provided lengths of the casing at 100% fill with no issues and within a timely manner in collaboration with the contractors.