

Pipe Casing Injection for Corrosion Protection of Pipeline Carrying Carbon Dioxide

Project Specifics

Installation Dates
June 15, 2020

Location
Texas, USA

Environmental Conditions
Partly cloudy, 50% humid, and 85°F.

Pipe Casing Construction Details
Casing Diameter: 24"
Pipeline Diameter: 20"
Length: 150'

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

Vessel Assessment

There is a slight decline going away from the aqueduct. Both vent pipes were located on the top of the casing. It should be noted that in January of 2020, prior to the injection, the end seals were refitted with new rubber seal gaskets. These excavated ends were not back filled and not covered.

The rubber seals were inspected and some drying and cracking noticed. Additional rubberized sealing tape was sourced locally and applied over the rubber gaskets on both ends of the casing.

Conclusion

The 3" vent pipe used for the injection had to be cut and fitted with 2" reducer and banjo type connector. Same 3"x2" rubber coupler was used to replace the cut section of the vent pipe to restore the "candy cane" like shape. The other vent pipe also needed a rubber coupler. The injection went well. PGH-300 and PGH-400 was added to the inhibitor slurry during the injection. A person stood watch over the opposite side of the casing to see if there was any discharge. None was reported.

