

# CASE STUDY



## PROJECT SNAPSHOT

**PROJECT**  
GeoKrete® Manhole Rehab Trial

**OWNER**  
City of Benton, AR

**PROBLEM**  
Heavily corroded manhole with extremely high H<sub>2</sub>S levels

**APPLICATION**

- Hyperform® Rapid Setting Patching Material
- GeoKrete® — 1 ½" spray-applied throughout, troweled to smooth finish

# City of Benton, AR Impressed with GeoKrete® in Manhole Rehab Pilot Test

## MANHOLE REHABILITATION PILOT TEST IN BENTON, AR

**VORTEX PRODUCTS USED**

1 GeoKrete®  
2 Hyperform®



### THE CHALLENGE

This was a highly corrosive manhole picked by Benton Utilities as a trial/demonstration for GeoKrete®, a structural, corrosion resistant geopolymer mortar. This manhole was approximately 8 feet in depth and had a forcemain dumping into the manhole upstream. The manhole was in desperate need of a structural lining system containing extreme corrosion resistant properties. H<sub>2</sub>S readings were between 195 and 225 ppm.

The walls were power washed with 4,000 psi and the steps were removed. Because of the severe deterioration of the bench, we rebuilt it higher with Hyperform® to control the flow from spilling over the bench.

This manhole was lined with with approximately 1 ½ inches of GeoKrete. This is another successful in-field demonstration of GeoKrete. After being in the ground for over 1 ½ years, the GeoKrete lined manhole is still structurally sound with no signs of corrosion deterioration present.

