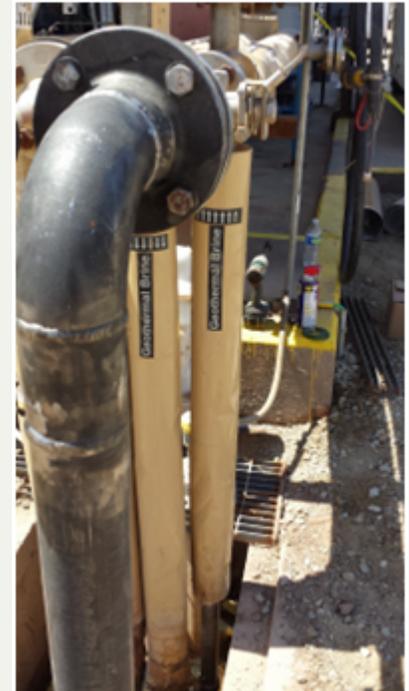


Case Study: Test Line Proves Effectiveness of Welded Joints for Rubber Lined Pipe

Geothermal brine water is notorious for its aggressive nature and quick destruction of most pipe and lining materials. Deriving from deep within the earth, the salts and minerals form abrasive crystals and come out of the ground at high temperatures and pressures. A plant in the Southwest U.S. was using geothermal brine water from a power plant to extract lithium, zinc, and other minerals.

After considering and testing various pipe materials such as 2205 Duplex and FRP, they decided to try rubber-lined carbon steel pipe with [Joint Lock welded connections](#). Bromobutyl rubber-lined carbon steel is significantly less expensive than Duplex steel, yet would offer a 10+ year lifespan. It is also much sturdier than FRP. Welded joints allowed for smoother, leak-free joints than mechanical joints and also for complete exterior insulation of joints – thereby reducing heavy scale buildup from temperature drops.

After eight months of service, the test line was removed and dissected to ascertain its effectiveness. They were pleased to see that the bromobutyl lining easily withstood the environment and the welded joints showed no signs of corrosion at the mating interface. When main pipeline construction begins, this pipe system is now the frontrunner due to its cost effectiveness and longevity.



"Corrosion of our pipelines occurs quickly due to the nature of geothermal brine. Recently we've been replacing some of the cement lined carbon steel pipe with the more expensive Duplex 2205 material. In addition to the corrosion, the pipelines can scale up with minerals, especially at flanged joint connections. The novel rubber lined carbon steel pipe with welded joints addresses these two issues for a lower cost than Duplex 2205. Due to the benefits seen to date, we intend to trial larger diameter pipe in the near future."

Paul Hanson
Plant Engineer

Schedule a Joint Lock Lunch & Learn at Your Office

Contact Us

Learn about the revolutionary benefits of welded joints for rubber-lined pipe:

- Zero leakage & maintenance free
- Ideal for higher pressures
- Lower cost system than flanged and bolted joints
- Allows quick field adjustment of pipeline lengths

Goodwest Linings and Coatings

8814 Industrial Lane

Rancho Cucamonga, CA 91730

888-499-0085

sales@goodwestlining.com

www.goodwestlining.com

To request a presentation, [email Ryan Sears](mailto:ryan.sears@goodwestlining.com) with Goodwest or call him at **951-288-5570**.

8814 Industrial Lane, Rancho Cucamonga, CA 91730

888-499-0085 - www.goodwestlining.com