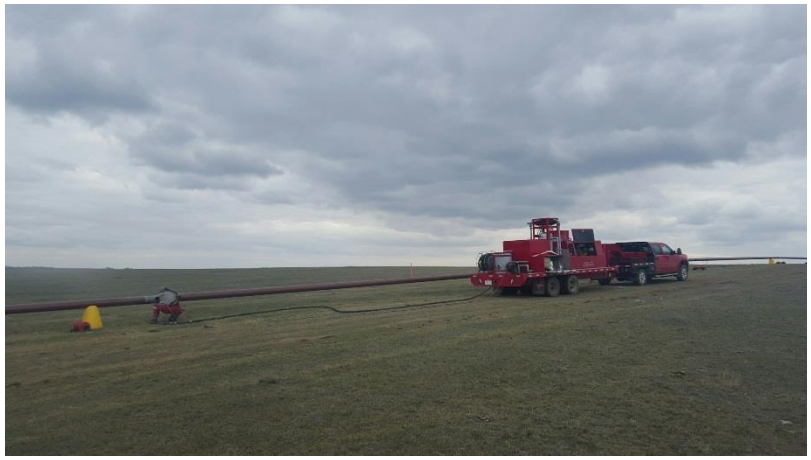
Pipeline Weld Coating for Burial

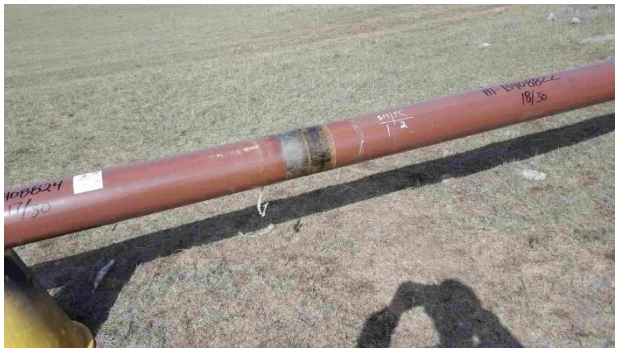
Ar-Tech Coating Ltd.

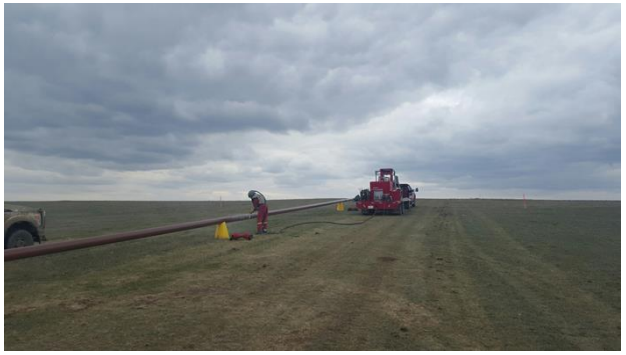
April 2016

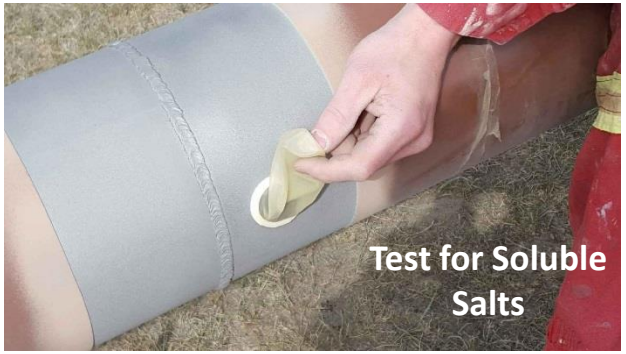


Background

Ar-Tech was on-site in Southern Alberta to complete the coating of welds prior to burial of a pipeline. This job was subject to CSA Standard Z245.30-14 (Field-Applied External Coatings for Steel Pipeline Systems). All welds were blasted, coated and inspected in 2 days. The inspection activities were extensive consisting of, but not limited to, testing for soluble salts, blast profile checks and blast media conformance. Additional checks for dry film thickness (DFT), cure hardness (Shore D) and coating adhesion were all documented and part of the final QC submission package.







All welds were solvent wiped and blasted to a white metal finish SSPC-SP5. The FBE jacket was brush blasted 50 mm a side to allow for coating overlap. Testing for soluble salts and surface profile were completed and environmental conditions documented.

Application

The customer specified HBE-95, a quick curing two-component epoxy novolac system. Pot life is extremely short at approximately 20 minutes for the slow cure grade. This product was designed to be brush applied to a thickness of 40 mils for this specific application. The product is applied to the weld cutback and overlaps the FBE jacket by about 50 mm.

The coating is applied by brush. All blasting, coating application and testing was conducted in accordance to CSA Z245.30-14 Field-applied external coatings for steel pipeline systems.

A joint was selected for the adhesion test. Cure hardness was also confirmed using a durometer. An eventual Shore D hardness reading of >85 was achieved. Final inspection consisted of high voltage holiday testing and a final visual check.