FQE® Barium-Clear will control scale in high temperature systems where polyphosphonates are not effective. This product may increase oil/gas production by removing scale that is restricting flow in the system.

Application
FQE Barium-Clear may be used in downhole or surface installations. Methods of suggested application include continuous treatment down the annulus or treating string of producing wells, with water flush and continuous injection into surface lines. It can also be used for formation squeeze treatment of oil wells.

Treatment
Downhole/Surface Facilities: An initial high dosage of FQE Barium-Clear at a concentration of 50-100 ppm (8-16 litres /1000 bbls) should be sufficient to remove scale build-up in the system depending on the severity of the scaling problem. A fill and soak or circulation method of application is recommended. The duration of contact with the scale deposits to be removed will depend on the scale composition and Barium Sulfate content. It should be used at full strength.

For oil well clean-outs, such as removing scale from the tubing, rods and pumps, at least 2 barrels is recommended. In water wells having high injection pressures as little as 1 barrel will obtain effective pressure drops. This is effective in stimulating oil well production by cleaning the formation around the well bore.

**Product Data**
- **Bulk density**: 9.36 lb/gallon
  1122 kg/m³
- **Solubility**: Complete in Water
- **Flash point**: > 200°F (93°C)
- **Approximate storage life**: 1 year

**Standard Package**
55 US gallons (208 litre) closed head poly drum, tote bin, or bulk.
Chemical Decontamination and Cleaning

CASE HISTORY
Rail Car Chemical Decontamination

Results Achieved
- Over 20 times, saving thousands
- Cleaning efficiency increased
- Removed all traces of LEL and H2S
- Dissolved the asphaltenes and other contaminants
- Minimal sludge deposits were observed
- Equipment charges were reduced.

Chemicals Utilized
- FQE® Solvent-ME
- FQE® Clean Road
- FQE® LEL-V

Description
A service company utilized FQE® Solvent-ME, FQE® Clean Road, and FQE® LEL-V for a rail car in Delaware. The refiner was looking to conduct a change of service on their rail cars from dark oil (crude oil) to clear fluid (ethanol) service. The cars needed to be fully de-oiled to eliminate any possible cross contamination.

Previously, the oil from the previous service was injected into the rail cars at a controlled rate until the effluent coming out of the bottoms drain was oil-free. To ensure that all the cars were truly de-oiled, FQE® Clean Road was subsequently injected into the rail cars as part of a final polish.

Prior to chemical application, it was confirmed that there was LEL and VOC emissions. For this reason, the client traditionally had issues with LEL and VOC emissions. A new process was chosen; the FQE® cleaning chemistries were applied to eliminate the asphaltenes and dissolved heavy deposits. The operation was done in record time.

Case Histories
Access a wide range of case histories to learn about the variety of applications our chemicals are utilized for.

fqechemicals.com/case-histories

White Papers
Our white papers provide deep insights into industry problems and how our innovative chemical products solve them.

fqechemicals.com/resources

Video Library
View videos from our lab where we have tested a range of client samples to show how effective our chemicals are.

fqechemicals.com/videos