



# Well Shut-in Inhibitors

## Specialty Additives

### Lubrizol's Solution for Well Shut-in Protection

Adapting to slowing industry conditions may require operators to shut-in wells for a period of time. Treating these wells with inhibitors will help prevent the destructive corrosion that occurs on steel casing and tubing from exposure to residual water. Well shut-in protection saves operators time and money when the well is set to become operational again.

Used in combination, Lubrizol's Alpha 3207 and IC 3 provide corrosion inhibition by providing a barrier to corrosive compounds and by removing oxygen that is dissolved in the water. Alpha 3207 and IC 3 are compatible with commonly used oilfield chemicals and readily available in convenient drum or tote packaging.

### Product Application

#### Problem:

Corrosion discovered on casing after a disposal well was shut-in for eight months with no treatment prior to shut-in. Significant time and money was required to put the well back into use.

#### Solution:

Before shutting in a well for any length of time, pickle the well for protection. Preventative treatment may result in significant long term savings.

#### Application Guidelines:

1. Mix 5 to 8 gallons of Alpha 3207 in 100 gallons of water
2. Add 2 to 4 gallons of IC 3 to the same water
3. For added protection a biocide may be added to the water at a concentration of 200 ppm
4. Determine the amount of water to fill the casing and tubing
5. Pump the water down the tubing and casing



Casing after eight month shut-in

Contact your Lubrizol Account Representative for more information.

Product	Chemical Type	Key Function	Application
Alpha 3207	Blend of organic acid amine salts	Water-soluble corrosion inhibitor	For packer fluids and for water injection system surfactants, waterflood injection and disposal systems and water clarifiers
IC 3	Catalyzed ammonium bisulfate solution	Liquid oxygen scavenger	For packer fluids, water-based drilling fluids, water injection system surfactants, and water clarifiers