



## Case History Glauconite Oil Well Plunger Lift

**Zone:** Glauconite

**Type:** Flowing oil well

**Production:** 8.5 E<sup>3</sup>m<sup>3</sup>

**Oil:** 1.0m<sup>3</sup>

**History:** This well was set up to be on a plunger lift system. Due to the severe paraffin build-up in the tubing this was unsuccessful and the plunger lift was taken out of service. To keep the well producing it had to be wirelined twice per week along with a competitor's chemical injection of 58 litres per day. The goal was to provide a solvent that would keep the tubular free of paraffin thus enabling the plunger lift to be put back in service.

**Testing:** Testing was conducted on paraffin samples obtained from the wireline knives. Several solvents and dispersants were evaluated and the Petrotreat PO24 Paraffin Solvent dissolved the sample completely and quickly. It was then determined that this product would provide the results necessary to meet the objectives.

**Treatment:** The well was first wirelined, and then 100 litres of the Petrotreat PO24 Paraffin Solvent was batched down the tubing. The plunger lift was put back in service and a continuous injection of PO24 was started down the annulus at 50 litres per day. This was optimized to 24 litres per day in conjunction with after-flow time of the plunger lift.

**Previous Costs:** \$103.00 per day (includes wireline costs)

**Current Costs:** \$67.00 per day

**Results:** With the plunger lift in service, the well now produces 1.61m<sup>3</sup> of oil per day. The wireline is no longer necessary and chemical injection volumes are decreased. With increased oil revenue and decreased chemical costs the well now reflects a profit increase of \$121.00 per day or \$44,165.00 per year.