



Pump Run Life Extended Significantly

The Dos Cuadras Offshore Oil Field has a long history of oil production located approximately eight miles off of Santa Barbara, California. Production is from five platforms with each having a water depth of approximately 190 feet. The primary hydrocarbon producing zone is from Pliocene sands in the Repetto Formation. The Repetto Formation presents a difficult pumping application due to the solids influx caused by layers of sandstone, siltstone, mudstone, and shale. There are approximately 145 producing wells from the five platforms that are pumped using a mix of Electrical Submersible Pumps (ESPs) and Progressing Cavity Pumps (PCPs).

The operator of the five platforms, DCOR LLC, is a technology focused organization that was not content with the average pump run life on a few of their most difficult wells due to solids settling on the discharge of the pump. Therefore, DCOR approached Production Tool Solutions looking for a device that would extend the run life of their pumping systems and subsequently reduce deferred production and lease operating expense.

Production Tool Solution introduced DCOR to the Pressure Actuated Relief Valve (PAR Valve™). This revolutionary valve is designed to open a communication path between the tubing and annulus upon pump shut down allowing the solids in the tubing string to be diverted around the pump instead of settling on top of the discharge. While the pump is on, the valve isolates the tubing and annulus allowing production to be maintained as normal.

After DCOR conducted their due diligence on the technology of the PAR Valve, they agreed to try a valve on an ESP pump that had previously seen numerous short runs. After installation, the pump operated normally and with assistance from the valve, was able to be restarted successful on a number of occasions. The addition of the PAR Valve more than doubled the pump's run life when compared to average.

Chuck Field, DCOR Senior Well Planner, stated "Before using the PAR Valve we were suffering from numerous short runs as many of our sand control completions aged. Since using the PAR Valve we have extended the run life of many of our wells and have increased revenue and reduced annual well servicing costs."

After the success of the first PAR Valve, DCOR initiated a campaign to install valves on their ESPs and PCPs that were facing trouble with solids fall back. Over the past 5 years, they have installed approximately 30 more valves and continue to see the benefits of the increased run life.

For more information on the Pressure Actuated Relief Valve by Production Tool Solution, please contact your local PTS representative or visit www.ptsprotects.com