

Gas Anchor System

Introduction

Quinn Pumps has designed an effective yet simple gas Anchor to produce high GOR wells using existing pumping equipment. It eliminates the need for expensive and sometimes un-reliable down hole tools. The proven technology, includes numerous metallurgical designs, to assist in any well condition.

Description

We run an open ended dip tube on the bottom of the pump in place of a strainer nipple. On the bottom of the tubing string the gas anchor housing is installed. This device is of a length of specially engineered barrel tube which has slotted ports near the top end, and a threaded plug at the bottom to form a fluid trap. At the top of the Gas Anchor, Quinn's run an API pump seating nipple to land the pump. The length and diameters of the Gas Anchor housing and dip-tube are calculated by taking into consideration the downhole configuration and the fluid velocities in side the Gas Anchor Housing.

Operation

This system is a proven theory, which simply uses the well configuration and gravity to break the gas out of the produced fluids. It does this by re-directing the well bore fluid to enter the Gas Anchor Housings top slotted ports, allowing most of the gas to break out of the fluid due to the pressure drop, and continue up the wellbore annulus. Any of the gaseous fluids which make their way into the anchor housing are then subject to the laws of fluid separation Which by the means of gravity work against a relatively low downward velocity, and a predetermined distance of travel for maximum separation.

Advantages

- * Minimizes the gas locking of pumps.
- * Increases production.
- * Decreases lifting costs.
- * Improves bottomhole pump efficiency.
- * Allows for problem wells to be pumped by conventional means.

