



Weatherford®

REAL RESULTS

Reciprocating Rod Lift Systems Increase Production by 20%, Reduce Idle Wells from 62% to 40%

Objectives

- Identify an alternative method of artificial lift to increase oil production to meet strategic targets for Thailand.
- Reduce the number of shut-in and idle wells in the field. As of 2010, there were 402 total active wells, but 249 (60%) of them were idle.

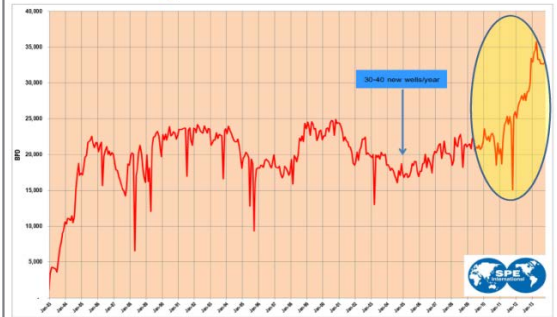
Results

- Weatherford assisted the client in performing a study for using reciprocating rod lift (RRL) as the artificial-lift method in the field. At the time of the study, gas lift, electrical submersible pumping (ESP), and progressing cavity pumping (PCP) were all being used in the field. Additionally, reciprocating rod lift (RRL) was being used in the field, but cautiously, because experience in Thailand for this form of artificial lift was limited. The results of the study proved that RRL was an innovative and viable option.
- A field trial was conducted using several ALS vendors. Upon completion of the trials, which were deemed a success, Weatherford was selected to provide products and services for the installation and commissioning of RRL systems, including Maximizer® pumps and VSH2 hydraulic pumps, downhole insert pumps, and sucker rods. The decision to proceed with installing RRL systems was made in 2011. By July 2013, 170 RRL systems had been installed on existing and new wells.

Value to Client

- The client experienced a 20% increase in production from the wells with installed RRL systems and achieved strategic production targets.
- From 2011 until 2013, the total number of wells increased from 402 to 550, while shut-in and idle wells decreased from 249 to 225. This reduction in idle wells from 62% to 40% resulted in reduced oil deferment.

Production History



Production in the client's field saw a small increase with the addition of the new wells, but did not achieve the desired production targets. The production began to increase significantly with the installation of Weatherford RRL systems on the wells.

Client

PTT Exploration and Production

Field

Sirikit (S1)

Location

Thailand

Well Type

Onshore, oil producers

Depth

1,500 to 2,000 mtv/d (2500 to 3000 mma/d)

Oil API Gravity

35 to 42

Water Cut

1% to 95%

Products/Services

- Maximizer beam pumps
- VSH2 hydraulic pumps
- Downhole insert pumps
- Sucker rods

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