

Successful PCP Application In La Cira Infantas Colombia Saves Operator 86% in Costs and Loss Production

Challenges

An operator in La Cira Infantas, Colombia has 1,125 active wells, of which 175 operate with artificial lifting systems with PCP pumping. The operator wanted to install new technology, and identified high gas and sand content to be a problem for high fluid producing wells in the area. The problem generated premature failures in the artificial lifting systems with Progressing Cavity Pumps during the production.

Solutions

The Apergy - Oil Lift Technology team worked together with the operator and developed a new PC Pump Geometry which extended the run life in a profitable way. To ensure the success of the application the team considered:

- Well history, existing challenges and needs
- PC Pump geometry alternatives and elastomer selection
- Rotor-Stator fit & expected efficiencies

Results

The economic benefit for using the PCP System was a savings of 63% in installation, maintenance and operations cost and 86% in deferred cost and lost production. The implementation of an innovative geometry of progressive cavity pumps in application with high sand and gas content, can improve the run life of the critical wells.



Cost Before PCP System Installation

WELL	DEFERRED COST BEFORE (USD)	W/O COST OF BEFORE INSTALLATION (USD)	TOTAL COST BEFORE INSTALLATION (USD)
Well 1	USD 88,950.00	USD 504,000.00	USD 592,950.00
Well 2	USD 47,800.00	USD 166,000.00	USD 213,800.00
Well 3	USD 45,850.00	USD 252,000.00	USD 297,850.00
Well 4	USD 22,450.00	USD 272,000.00	USD 294,450.00
Well 5	USD 91,200.00	USD 398,000.00	USD 489,200.00
	USD 296,250.00	USD 1,592,000.00	USD 1,888,250.00
		USD 1,888,250.00	

Cost After PCP System Installation

WELL	DEFERRED COST AFTER (USD)	W/O COST OF AFTER INSTALLATION (USD)	TOTAL COST AFTER INSTALLATION (USD)
Well 1	USD 18,500.00	USD 136,000.00	USD 154,500.00
Well 2	USD 5,600.00	USD 70,000.00	USD 75,600.00
Well 3	USD 6,200.00	USD 126,000.00	USD 132,200.00
Well 4	USD 2,000.00	USD 126,000.00	USD 128,000.00
Well 5	USD 10,200.00	USD 126,000.00	USD 136,200.00
	USD 42,500.00	USD 584,000.00	USD 626,500.00
		USD 626,500.00	

To learn more, please contact us at 1-403-291-5300 or email denis.blanquiere@apergy.com