

**MEXICO-POZA RICA: SOLVING LOSSES IN COILED TUBING WORKOVER OPERATIONS WITH APHRONS ICS™**

“The benefits of the APHRON ICS system proposed by MI, allowed us to run logs in the well, keeping the hole in the desired conditions and successfully complete our workover operations. After two days of pumping different products and brine of 8.4 ppg, APHRON ICS proved to be the solution. The system will be our first choice when similar situations occur in the future, particularly when reduced equipment is present at the wellsite”

*Jose Lopez, Engineering Department, PEMEX Poza Rica.*

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## **Well Information**

Location:	Tajin Field, Poza Rica - Mexico
Spud/Completion:	May 2003
Interval:	Workover and Completion with Coiled Tubing
Mud Weight:	7.6 ppg (0.91 SG)
Yield Point:	31 lb/100ft <sup>2</sup>
Plastic Viscosity	7 cPs
Gels	12/22/28 lb/100ft <sup>2</sup>
Hole Angle:	J well. Max deviation 35 degrees.

## **The Situation**

To be able to have a quality log, the operator needed to have the hole full with fluid. After pumping several barrels of low density potassium chloride brine and two days of lost rig time the operator decided go with the APHRON ICS fluid to solve the loss problem.

## **The Solution**

The M-I engineering group recommended the use of the APHRON ICS system due to the zone characteristics of depleted sands and estimated pore pressures of less than 6.0 lb/gal density equivalent. The Operator accepted the recommended and decided to use the system.

## **The Results**

After 157 bbl of APHRON ICS fluid were pumped into the hole 100% circulation was achieved. Logging and workover operations were performed without problems or further losses.

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In the Tajin field near Poza Rica, Mexico a log was requested from a production well by the operator to obtain valuable information. A Coiled Tubing Unit was contracted to fill the well with 8.55 ppg KCl brine and kill the well. Total losses were observed. After several attempts to cure the losses and two days of lost rig time the operator decide try the APHRON ICS System to solve the problem.

## **The Details**

Due to the lack of mud pits on the wellsite (coiled tubing operation) 285 bbls of APHRON ICS fluid were mixed in MI's Mud Plant in Poza Rica and moved to the well with tank trucks. A batch mixer was used to pump the fluid into the well. A pill containing a high concentration of Blue Streak was pumped ahead of the fluid to the presence of a high volume of Aphrons.

After 157 bbl of APHRON ICS fluid were pumped into the well complete circulation was achieved and maintained. Logging operations were performed without a problem and the well was brought back on line with full production.

**Questions?  
We'll be glad to  
answer them**

If you would like to know more about the Aphron Technologies and how it's performing for our other customers, please call the M-I office nearest you

