

# PARAFFIN CONTROL TREATMENT INCREASED ANNUAL REVENUE FOR DELAWARE BASIN OPERATOR BY 1.8 MILLION USD



## CHEMICAL SOLUTIONS

### Challenges

- Delaware Basin Wolfcamp horizontal producing wells
- Production decline from 1,150 to 715 BOPD during a two-month period
- Production tubing severely plugged in top 1,500 feet

### Tech Management Solution

- Tech Management PAO103 solvent treatment
- Continuous treatment with Tech Management PAO2592 paraffin inhibitor to control paraffin deposition long-term
- Saved an estimated 2.1 million USD in annual remediation costs; eliminated an estimated 36 well pulls annually and associated production lost

### Results

- Increased annual oil production by 8%, from 1,150 to 1,240 BOPD
- Increased annual revenue by 1.8 million USD based on increase in production
- Saved an estimated 2.1 million USD in annual remediation costs; eliminated an estimated 36 well pulls annually and associated production lost

### Delaware Basin Wolfcamp - Paraffin Solution

An operator in the Delaware Basin experienced a rapid production decline on six horizontal wells producing out of the Wolfcamp formation. The decline was seen after an artificial lift change, conversion from ESP to rod pump. The wells experienced a decline in oil production of 38%, going from 1,150 to 715 BOPD, during the initial two-month period of rod pump lift operations. The operator and Tech Management's technical team determined that the decline was due to deposition in the top 1,500 feet of tubing. Though the rod pump lift type was still fully operational, the production flow was restricted in the top section of the production tubing, resulting in declined production.

Lab analysis revealed the deposition was predominately paraffin and the Tech Management field team recommended a two-step remediation approach. A Tech Management PAO103 paraffin solvent treatment was used to clean the well. Paraffin was removed with the solvent and then produced out of the well. Then, continuously applying a treatment of Tech Management's PAO2592 paraffin inhibitor that has prevented the precipitation of paraffin for a one year period on the next six wells.

After cleaning up the well with PAO103 solvent and applying the continuous PAO2592 paraffin inhibitor treatment, the production of the field experienced an increase in production of 8% above the pre-rod lift production, going from 1,150 to 1,240 BOPD in a six month period. The production has remained stable for a one year period, while paraffin monitoring with coupons has shown effective treatment results.

Based on the success of the program, the operator made it standard practice to implement the PAO2592 for all artificial lift conversions to keep paraffin under control.

*Note: This case study is presented for illustration purposes only as results may vary between applications.*

