CASE STUDY



OBJECTIVE

Artificial lift in "crooked" deviated wellbore. Rod pump continuaously fails due to tubing and rod wear. Well has to be worked over every 3-4 weeks.

RESULTS

Installed conventional 2.8 jet pump and powered with low cost 30 HP diaphragm surface skid. Jet pump has been lifting the well since April 2008.



JJ Tech

5220 Hollywood Avenue Shreveport • LA 71109 www.j-jtech.com 1•877•217•3590

Crooked Hole Installation



ULTRA FLOW PRODUCTION SYSTEM 30 HP DIAPHRAGM PUMP 1200 PSI/1200 BPD

ADVANTAGES OF JET PUMP

- · Ability to treat power fluid with corrosion/scal inhibitors
- No moving parts down-hole
- Can produce high volumes of fluid
- Software can calculate PBHP based on production volumes

C+:4

914

722

12

SOFTWARE ANALYSIS

Input Data	
COMPANY:XX	LEASE:XX
WELL IDENTIFICATION:Howard	REPRESENTATIVE:CBL
PUMP DEPTH:2780Feet	TUBING LENGTH TO PUMP:2780Feet
TUBING ID:2.441Inches	TUBING OD:2.875Inches
CASING ID.:4.9Inches	POWER FLUID:Water
BH TEMP.:120Deg F	FLOWING WH TEMP.:100Deg F
GAS LIQ. RATIO:20SCF/BBL	DESIGN LIQ. PROD. RATE:300BBL/DAY
PROD. RETURN:Annulus	PRODUCED OIL GRAVITY:40API
PROD. WATER GRAV: (Sp.Gr.):1.05	PRODUCED GAS GRAVITY:0.7
WAT. FRAC.: (50% = 0.50):0.92	SURFACE HYD. PRESS.:1200psig
PUMPING BHP:650psig	FLOWING WH PRESS.:75psig
Date:: 07 - February - 2011	
Computed Output Data - English Units	
Pump Power Power Horse No	1-Cav Prod. Pumping Nozzle Throat
Size Press Fluid Rate Power Ra	e Rate Bot-hole Area Area
psig bblpd bb	pd bblpd psig inches inches

418

300

650

.015

.0314



TYPICAL JET PUMP SURFACE DIAGRAM





30 DIAPGRAGM PUMP SKID | 2.3 JET PUMP | NORTH LOUISIANA OIL WELL