Breakout – Sucker Rod Lift Discussion

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Attendee Distribution

- Total of ~40
- Producing/Operating Company: ~20
- Supplier/Manufacturer: ~18
- Consultants: 2
Topics

• Use and setting back pressure valves (BPV) to prevent gas interference/ gas locking
  – Some operators use them but mainly on oil wells
  – Most start with 200 psi setting and then adjust by trial and error until when flumping or dry tubing doesn’t occur

• Stuffing boxes
  – When higher well head pressures are occurring and BPV are used, it was recommended that a pressure test be conducted on stuffing boxes to assure the main sealing gasket doesn’t leak.
TOPICS (cont)

• Stuffing box packing
  – Most using rig crew to repack; but procedure becomes a concern since they may repack while box is not installed, hook it up, then run polished rod and/or liner which then tears up the new packing.

• Build rates for horizontals and problems with pumps
  – 20 to 30 degrees/100 ft normally recommended and can easily hold
  – BUT, build rate not a concern, dog leg severity is
TOPICS (cont)

– Should keep DLS as low as possible and should be <1 degree/100 ft where seating nipple and pump will be landed

– Best recommended practice is to keep well vertical as deep as possible and drill tight “L” shape OR preferably SUMP THE PUMP in rat hole

– A few operators have been doing this with success; one in Michigan is one of the best producer w/limited failures and pumping problems

• Use of Special rod pumps

– A poll showed majority of operators using standard pumps with only a few using special pumps
A concern expressed with running special pumps in new wells is if truly needed, maybe should run standard pump and see there are problems and type.

**Types of surface units**

- Majority using conventional pumping units; but, some using hydraulic driver rod unit mainly due to lower volume lifted and long, slow stroke.
- Type of “conventional” discussed since beam balanced unit may be better choice than rotary crank counterbalanced especially for shallow (<6000 ft), lower volume wells.
TOPICS (cont)

• Running TAC and gas interference
  – Concern expressed on ROT not to run TAC for GWD since heard of interference problems and did not want to gas lock pump
  – TAC should not effect downhole gas separation or pump performance since it is normally placed above the top perfs.
  – Interference was originally in gas flow rates (but basis of wells were low BHP and low rate)
  – There are TAC with improved flow area
  – MORE WORK and PRESENTATIONS REQUIRED
• Failure Analysis
  – Only a few operators knew failure frequencies for their fields
  – Most did not include all equipment suppliers in monthly failure meeting reviews
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