



Weatherford®

REAL RESULTS

WellMaster™ Deepwater System, SurgeMaster™ Tool Gain Well Control, Avoid Formation Surge, Eliminate Failures Costs

Objectives

- Avoid the surging formation risk when running the casing because of the tight tolerances between the 13 3/8-in. and 11 3/4-in. sections.
- Isolate an unstable formation and continue drilling the 9 5/8-in. section.
- Ensure the casing reaches the bottom of the wellbore and minimize casing running time and openhole exposure.

Results

- Weatherford personnel deployed the following *WellMaster* configuration: *SurgeMaster* II multiple-opening diverter tool, premium hydraulic rotating liner system with integral liner top packer, Sub-Surface Release™ wiper plug, MudMaster™ II filter shoe, and auto-fill float with a Defyer™ drillable casing bit.
- The *SurgeMaster* II tool displaced significant volumes of fluid up to the wellbore, passing the fluid into the annulus between the drillpipe and the casing and eliminating surge pressure on the formation during the run-in.
- The *Sub-Surface Release* plug system provided primary cement placement and isolated the unstable formation in the 9 5/8-in. section.
- The *MudMaster* filter shoe with the unique shoe-track design enabled the mud to flow freely through large flow areas while trapping wellbore debris in the annular section between the screen OD and casing ID.
- Surge pressure was reduced because the liner system was run in conjunction with an auto-fill float collar and *Defyer* tool at the bottom of the string.
- With this tool combination, the operator improved overall well control and personnel safety by avoiding a formation fracture or blowout, and successfully placed 2,260 ft (689 m) of the new liner at 3,832 ft (1,168 m).



Weatherford's *WellMaster* all-in-one system with the *Defyer* drillable casing bit decreased the piston and surge effect, enabling the operator to improve overall well control on this Peruvian well and avoiding failures usually associated with tight tolerances.

Location

Ucayali, Peru

Well Type

Onshore, development

Hole Size

12-1/4 × 14-1/2 in.

Depth

- 3,097 ft (944 m) Open hole
- 3,832 ft (1,168 m) Liner set
- 7,120 ft (2,170 m) MD
- 6,900 ft (2,103 m) TVD

Average Inclination

33.6°

Casing

11 3/4-in., 65-lb/ft P-110 TBNF liner

Products/Services

- *WellMaster* system
- *MudMaster* II system
- *SurgeMaster* II multiple-opening diverter tool
- *Sub-Surface Release* wiper plug
- *Defyer* drillable casing bit
- 11 3/4- × 12 1/4-in. liner
- Rotating hydraulic lock setting tool
- Rotating hydraulic hanger
- Large bore auto-fill float collar

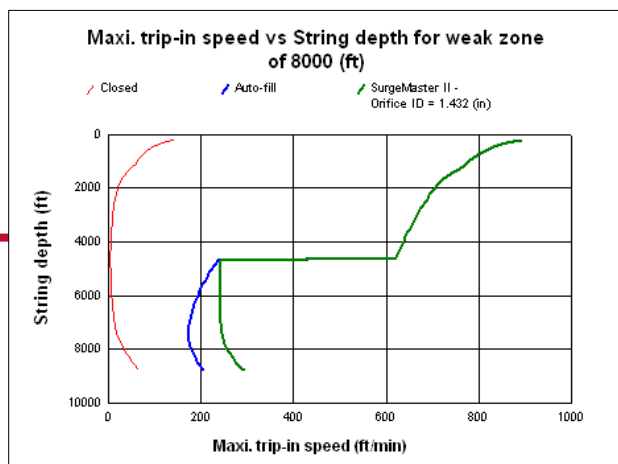


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Value to Client

- Using Weatherford's WellMaster™ system enabled the operator to increase safety by improving well control during running operations in and out of the wellbore, preventing the typical piston and surge effect and avoiding formation fractures and hole blowouts.
- By controlling the well, the operator increased the tubular running speeds, decreasing the overall time and costs of the operation.
- Weatherford's combination system helped the operator significantly reduce the risk and potential failure costs when running in close tolerances, saving the operator rig time and associated costs.



SurgeMaster™ II multiple-opening diverter tool reduced surge pressure, increased running speeds (as shown in this chart), and decreased potential safety hazards by directing mud into the annulus above the casing or liner.

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