IADC Drilling Manual
And…

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08 May 2015
Cementing Chapter released as part of newest IADC Drilling Manual

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Contents of the Cementing Chapter
Focus on what rig personnel need to know

Why

- Cementing and safety
- Relevance of cementing for the drilling process
- Types of cementing jobs

How

- Preparing the well and wellsite for cementing
- Job design, pumping and displacing cement
- Wait on cement time and post-job rig operations
- Cement evaluation

What

- Cements and cement additives
- Cementing strings and associated hardware
Topics of Particular Interest to this Workshop

Borehole-cleaning evaluation

Cement evaluation

• CE chapter emphasizes importance of knowing and documenting goals of the job and means and for evaluating success beforehand
• “The job history provides strong indicators regarding successes or problems”

Sustained casing pressure

• Not specifically mentioned in the Cementing Chapter
• An outcome which may be indicative of inappropriate cement design, ineffective cementing practice or damage incurred after drilling and completion, during the course of production operations.

Barriers and cement integrity during P&A operations
Topics of Particular Interest to this Workshop

Borehole-cleaning evaluation

From sections *Preparing the well and wellsite for cementing* and *Job design, pumping and displacing cement*

Before casing run

- Desired mud properties achieved
- Torque/drag acceptable

After casing on bottom

- Bottoms up/casing volume pumped
- Desired mud properties achieved
- Centralization indicated

During cementing

- Bottom wiper plug used
- Pipe movement used
- Designed pump rates achieved
Topics of Particular Interest to this Workshop
Barriers and cement integrity during P&A operations

Maintaining barriers in place during P&A operations

• **WOC time and post-job rig operations** provides some basic operational guidance

Barriers to be verified or constructed during P&A operations

• **Well cementing purposes** identifies these specific isolation needs:
  • Freshwater aquifers
  • Potential flow zones, permeable formations, or those that can be fractured
  • Hydrocarbon-bearing zones
  • Between production zones that might become drawn-down or over-pressured relative to one another during life of field
  • Across naturally occurring pore pressure ramps
Watch for Other Chapters in the IADC Drilling Manual Series (12th ed)
IADC Drilling Series Book on Cementing
Titled “Well Cementing Operations”

- Published earlier this year by IADC
- IADC’s Technical Publications Committee
  - Approved the outlined content proposal
  - Supported and guided the book’s development
  - Reviewed and approved the prepared content
- Cementing Service and Associated Companies
  - Provided data and graphics
  - Approved the discussion of their data and graphics
- Other books in the Drilling Series
  - Underbalanced Drilling: Limits and Extremes, 2012
  - Managed Pressure Drilling, 2008
  - Casing and Liners for Drilling and Completion, 2007
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Thank you for your attention.

Questions?