

IADC Drilling Manual And...

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Cementing Chapter released as part of newest IADC Drilling Manual

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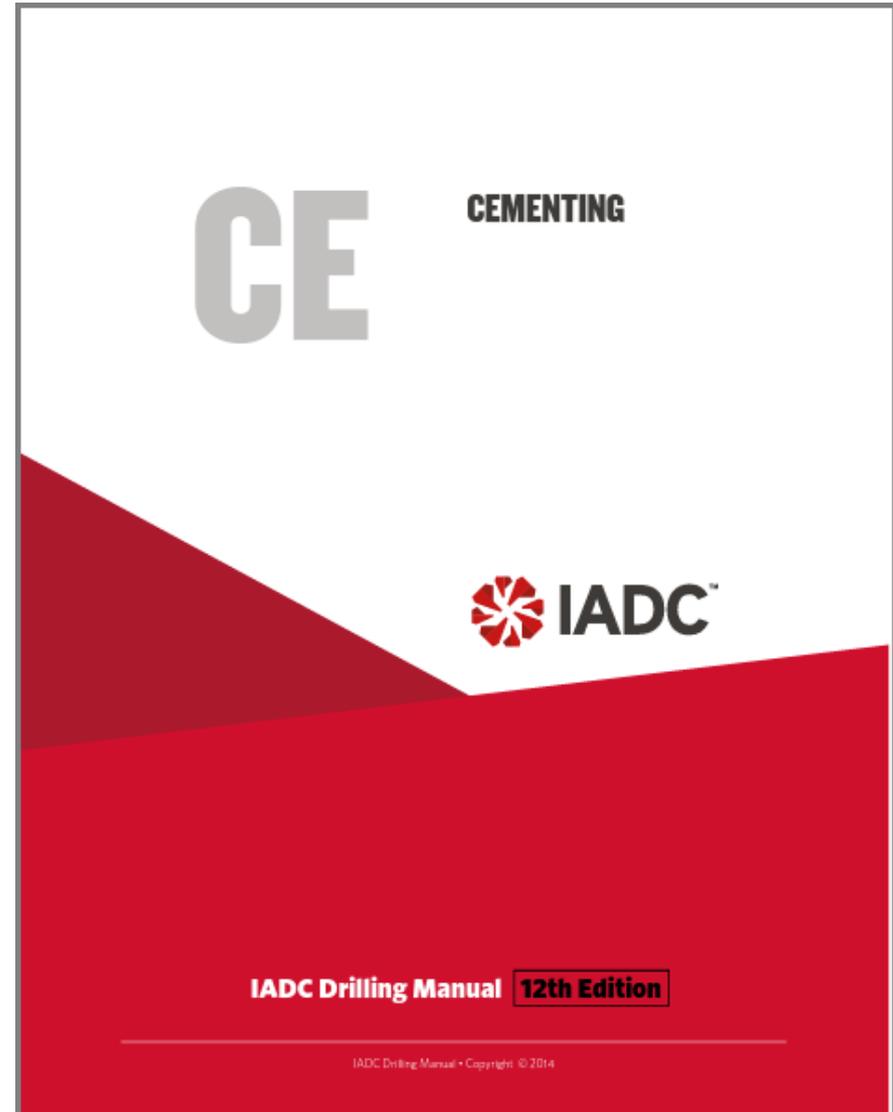
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Contents of the Cementing Chapter

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

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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

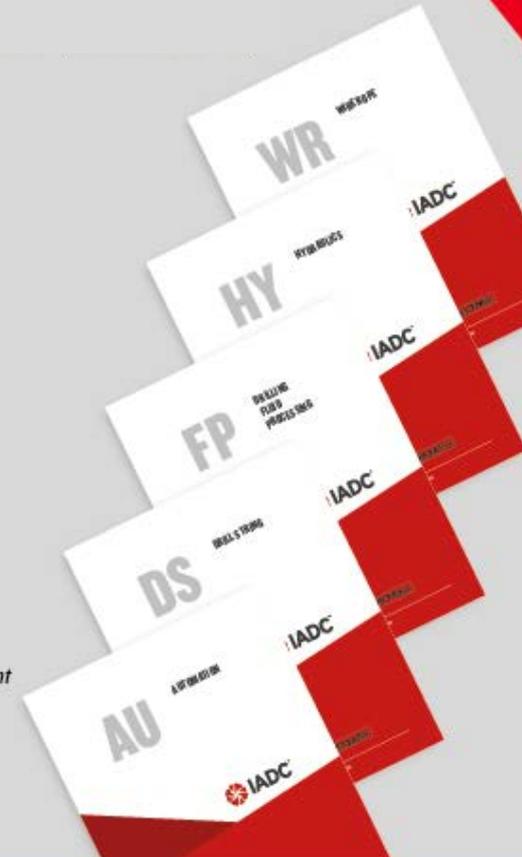
- **WOC time and post-job rig operations** provides some basic operational guidance

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)

Automation
Drill Bits
Casing while Drilling
Cementing
Chains & Sprockets
Directional Drilling
Downhole Tools
Drill String
Drilling Fluid Processing
Drilling Fluids
Drilling Practices
Floating Drilling Operations
Fluid Hydraulics
Lubrication
Power Systems
Pumps
Rotating & Pipehandling Equipment
Special Operations
Structures
Well Control
Wire Rope



IADC Drilling Manual **12th Edition**



*Titles and release dates are subject to change. Stay tuned at www.iadc.org for more information.

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



IADC Drilling Series Book on Cementing

“Well Cementing Operations” Table of Contents

➤ Chapters

1. Introduction to Cementing
2. Casing and Tubing
3. Cements and Additives
4. Primary Cementing
5. Primary Cementing Calculations
6. Liner Cementing
7. Plug-Back Cementing
8. Squeeze Cementing
9. Surface Cementing Equipment
10. Downhole Cementing Equipment
11. Cement Mixing and Pumping Equipment
12. Bulk Cement Storage and Handling
13. Offshore Cementing
14. Foam Cementing
15. Primary Cementing for Horizontal & ERD Wells
16. Cementing Technology Developments

➤ Appendices

- Appendix A: General Safety & Work Guidelines
- Appendix B: Cementing Personnel Job Descriptions
- Appendix C: RedBook Website Instructions
- Appendix D: Glossary of Relevant Oilfield Terms, Slang, & Acronyms
- Appendix E: Index

IADC Drilling Manual and Cementing Book

Thank you for your attention.

Questions?