DNV·GL

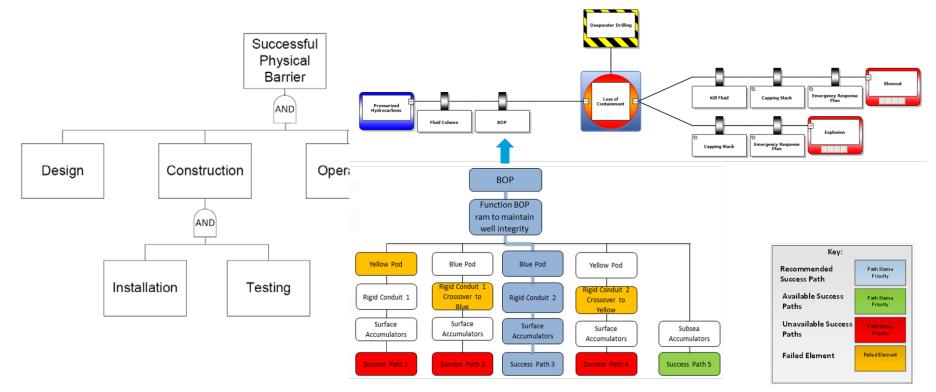
Decision Support for Dynamic Barrier Management - Summary of JIP

IADC DEC Committee Tech Forum

Bryce Levett 15 November 2017

Background - similar approaches

- Argonne National Laboratory Multiple Physical Barrier (MPB)
- DNV GL Bow Tie Diagrams with Success Paths



- Objective
 - Assess value of barrier-success path approach
- Scope
 - Select well integrity scenario for case study
 - Conduct workshops to apply approach
 - Capture lessons and assess benefit
- Participation
 - Regulators
 - Operators
 - Drilling Contractors
 - Service Companies
 - Sponsored by Argonne National Laboratory on behalf of BSEE

- Success paths developed for generic P&A case (Design, Install, Test)
- Regulatory compliance tree for P&A (30 CFR 250.1715)
- Final report issued in Feb 2017

Feedback

- Common/simpler framework for communication and consensus
 Fewer ways to succeed than fail
- Useful for developing operating procedures
- Pre-identify alternatives and secure approval in advance
- Keeps bow tie diagrams simple

Further reflections on approach

- The order in which barriers are implemented or act
- Details on human interaction
 - Number of times
 - Single or multiple individuals
- Target areas for automation
- Target areas for improved monitoring

Questions?

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