RDM – Wells Management Strategic Initiative Slim Hole Drilling (SHoD)



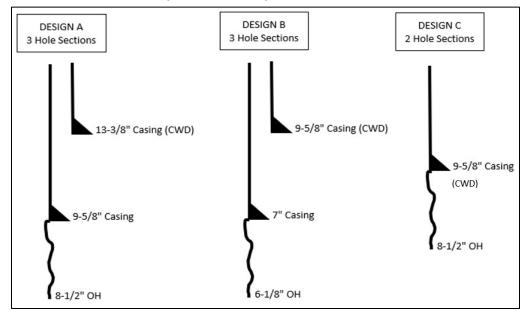
As a base case, the following definition is to be adopted for slim well applications in Malaysia, for exploration and development wells respectively.

- i. Exploration / Appraisal Wells:
 - Wells with ≤ 13-3/8" Conductor (wells with ≤ 3 hole sections)
- ii. Development Wells:
 - Wells with \leq 6-1/8" Production Hole (wells with \leq 3 hole sections, for all completion types)

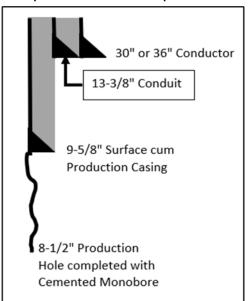
or

• Wells with 8-1/2" Production Hole (wells with ≤ 3 hole sections), which are completed via 3-1/2" or 4-1/2" Tubing Cemented Monobore.

Example of Slim Exploration Wells



Example of Slim Development Wells



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Slim Hole Drilling (SHoD) Application & Replication Roadmap

Awareness & Promotion

- Promoted and pursued Knowledge Sharing (SPE Workshop May 2018).
- Developed first SHoD guideline - MPM Focal Point leading and spearheading the initiative.
- Total Slim Well Completed in 2018: (4 EXP wells)

Promotion & Application

- Syndication with PACs to promote SHoD especially for NFE (Near Field Exploration) wells.
- Well candidates screening.
 - Organized scheduled sharing session through SPE workshop and COPs (Community of Practice).
- Collaborated with industries leaders to support SHoD.
- Developed lessons learnt database to enhance SHoD practices.
- Total Slim Well Completed in 2019: 14 (3 EXP wells / 11 DEV wells)

Application & Replication

- Tracked & replicated best practices from previous projects.
- Set up a Focus Group consisting of PACs with focus on NFE/NFD (Near Field Development) and Marginal Field projects.
- Syndication with FDP (Field Development Plan) teams on completion strategy.
- Developed rig specification for Slim Hole Drilling.
- Organized regular sharing session through DRILLTeC or any suitable medium.
- Total Slim Well Completed in 2020: 12 (6 EXP wells / 6 DEV wells)

Replication & Standardization

- Continue to organize regular sharing session through DRILLTeC, COMSTeC or any suitable medium.
- Update / revise SHoD Guideline (SHoD Guideline 2.0).
- Continue to push SHoD agenda in industry-wide platforms such as "SPE Virtual Workshop: Asia Pacific Wells Week".
- Interdisciplinary alignment with subsurface and facilities via DRILLTeC's SHoD Working Group.
- Support NFD-FDP team and push the idea until sanction.

SHoD as a culture

- Grow and mature SHoD by increasing application in development and exploration drilling projects.
- SHoD well design as a standard practice for NFE and Marginal field projects.
- To achieve 50% SHoD well design for exploration wells.

2018 2019 2020 2021 2022