Subsea Well Abandonments Shell Everest 2016 Case History

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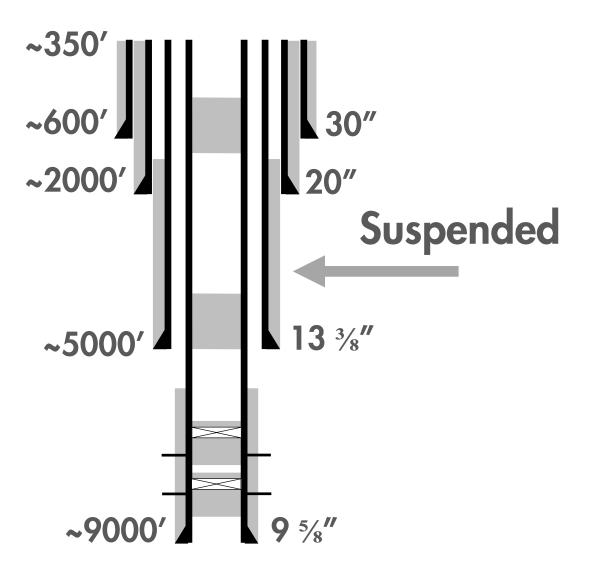
Agenda

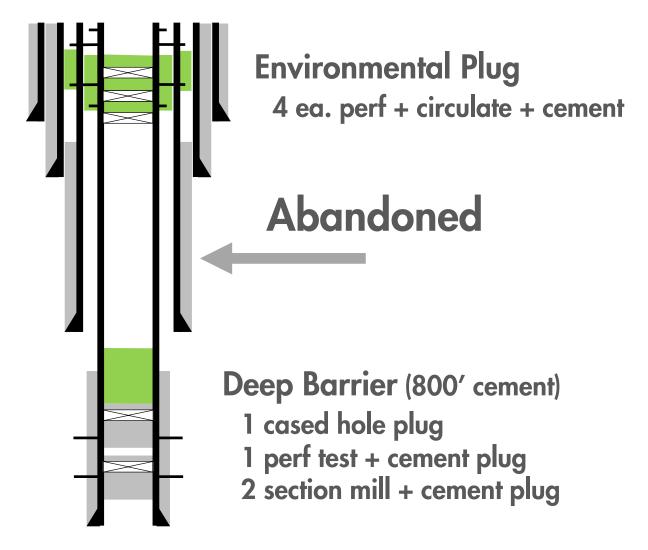
- 1. What we learned on Everest last year.
- 2. How are we applying it to the current campaign this year.
- 3. Where do we go from here 2018+ campaign.
- 4. Q & A

Abandonments Timeline

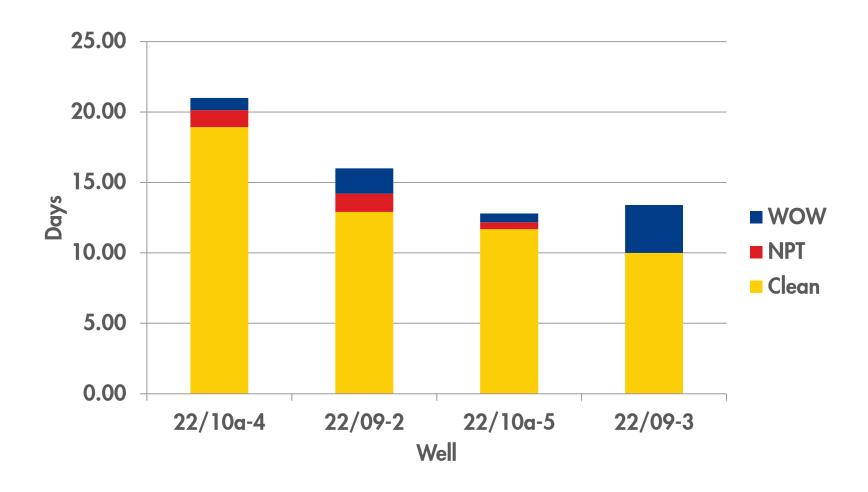


Everest Overview - Four Subsea Wells

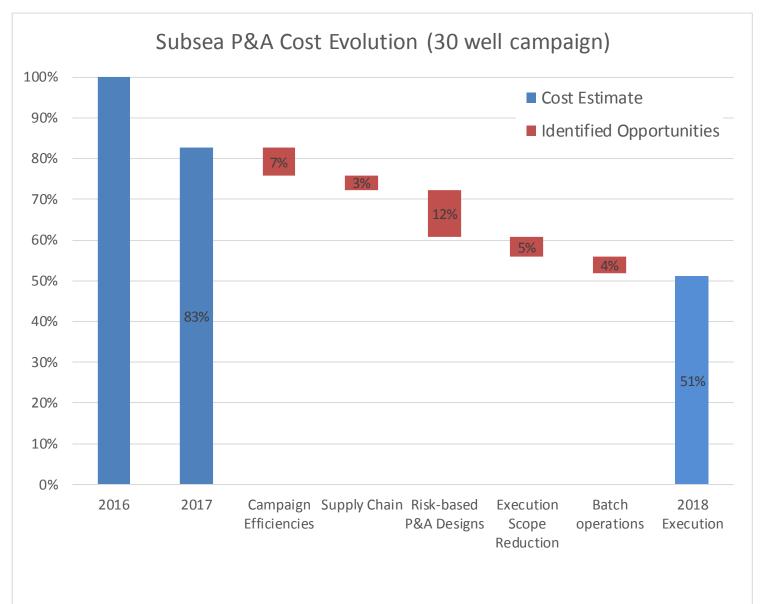




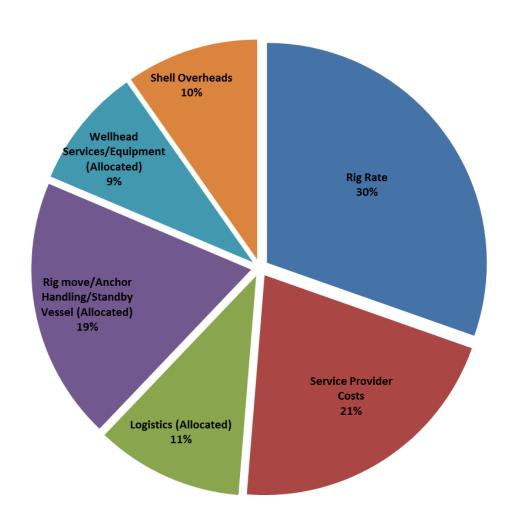
Everest Learning Curve



Subsea P&A Cost Evolution



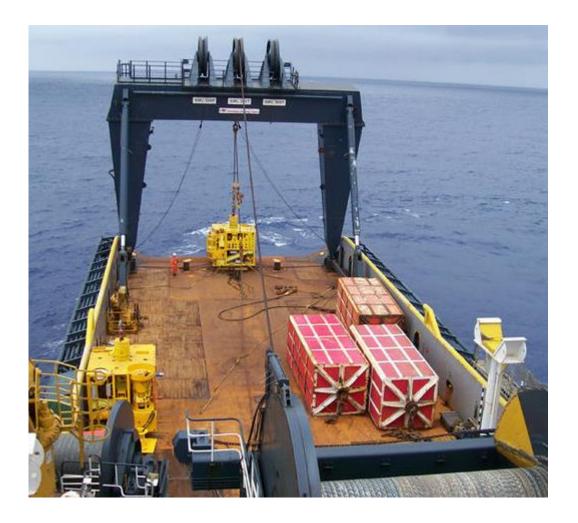
Subsea P&A Cost Breakdown (Typical Development Well P&A)



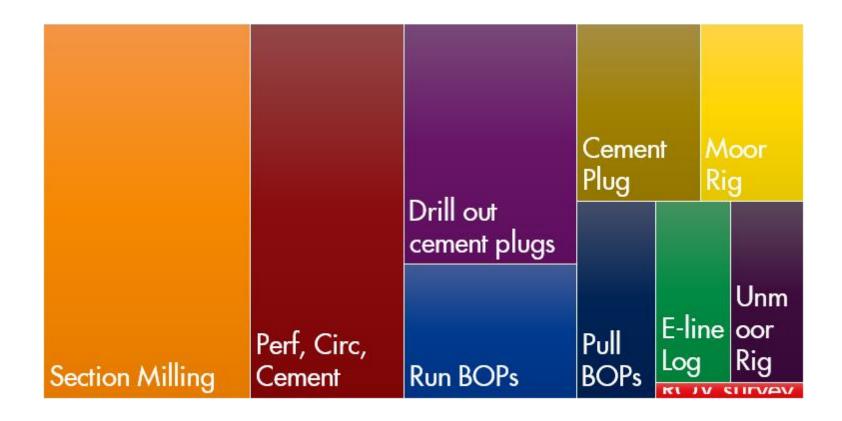
- Rig rate and service provider costs only represent
 ~50% of the overall cost
- Remaining ~50% currently managed internally by Shell (Marine, Logistics, Overheads)

Optimisation of Work Unit Scope Allocation





Abandonment Phase Duration



Abandonments Timeline



Keys to Success

- Fully appreciate that abandonment work is different than drilling new wells.
- Early identification of performance improvement opportunities.
 (most of which are not new)
- Include marine and logistics in the performance improvement focus.
- Using a systematic approach to attack and implement improvement initiatives.



