



Oil & Gas
Authority

Decommissioning examples

1. Shell Brent Field Wells P&A success story
2. CNRI Ninian North well P&A
3. Onshore disposal of Buchan Alpha

1. Shell Brent Field Wells P&A



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Significant reduction in time and costs

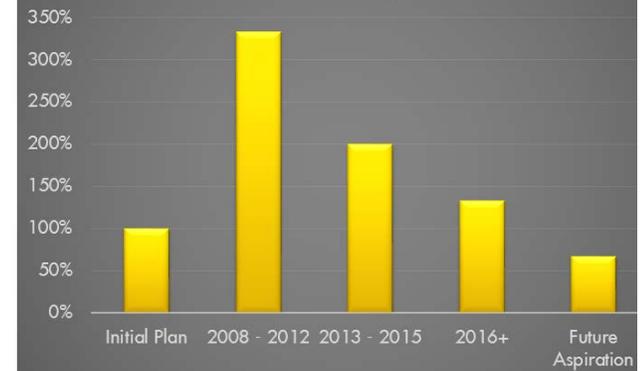
- Brent Delta's 40 well P&A campaign Q4 2008 –completed Q2 2014. Completed 37 well P&A campaign on Brent Bravo 12 months ahead of schedule. Over 50% of Brent Alpha wells P&A by Q4 2017 – anticipated to complete 24 months ahead of original 2015 schedule. Brent Charlie – 4th well abandonment completed in 8.4 days.

Achievement based on:

- Competitive scoping – full transparency of costs and value; design and technical specification aimed at assuring acceptable performance
- Affordable Technology and Innovation required to overcome challenge of complexity, age, and nature of the Brent Field wells (154 in total)
- Optimal barrier selection through in-depth subsurface analysis
- Efficient execution – well monitoring pre and post P&A; integrated planning; upfront well P&L
- Collaboration with other operators via P&A Forum
- Supply chain transformation - collaboration with supply chain partners; integrated 2 contracts model –drilling contractor and Integrated Service Provider; multi-skilling and reducing POB, team building, accurate demand forecast, continuous improvement, recognition.



Average Rig Days to P&A



OGA Decom Team comments

This performance review supports messages from industry that delivering the cost reduction target is achievable through:

1. Collaboration with other Operators and implemented lessons learned
2. Challenging the norm and current work practices
3. Working together closely with the supply chain and adapting transformational models
4. Adapting available technology in an innovative way
5. Integrated planning

Key facts

- Brent Bravo campaign (Q1 2011-Q1 2017) Average rig days – 45; best 16 days;
- Brent Alpha campaign (Q4 2016 – Ongoing) Average rig days 23; best 8 days
- Brent Field P&A campaign achieved a year on year cost reduction relative to 2014 of over 50% by 2017



2. CNRI Ninian North Decom



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CNRI milestone achievement announcement

- Completed 24 well P&A campaign on 28 February 2018, 3 months ahead of schedule
Achievement based on:
- One-team approach, closely working together with the supply chain and selection of the right vendors and tools
- Optimal barrier selection through in-depth subsurface analysis
- Innovative approach for Xmas tree removal
- Continuously resetting the technical limits throughout the campaign



OGA Decom Team comments

Announcement supports messages from industry that delivering the cost reduction target is achievable through:

1. Ensuring lessons learned are implemented and shared
2. Innovative technical approaches are adapted
3. Working together closely with the supply chain
4. Continuous learning
5. Well planned P&A campaigns will ensure significant cost savings for the P&A activity and will result in reduced Operator post CoP cost



Key facts

- Average cost per well $<P_{10}$ compared with the current NNS OGA P_{50} benchmark of £3.6 million
- Ninian North P&A campaign achieved a 40% schedule improvement per well compared to Murchison P&A campaign
- Ninian North decommissioning programme $>35\%$ cost reduction per well or per facilities tonne compared with Murchison

3. Onshore Disposal of Buchan Alpha

Background

Norwegian-based companies have been successful in winning contracts for a number of decommissioning projects, resulting in infrastructure from the last three large decommissioning projects (at that time) being sent to Norway instead of the UK for onshore dismantling

Details

UK yards are however investing and upgrading facilities and when the Buchan Alpha decommissioning contract went out to tender the OGA Supply Chain team worked closely with organisations to help them prepare a competitive bid. These included the Scottish Environmental Protection Agency (SEPA) and Scottish Government (regarding environment regulations for onshore disposal of non-compliant waste materials) and Highlands and Islands Enterprise in relation to their investment in the Dales Voe quayside facility on Shetland.

Outcome

The UK/Shetland bid for the onshore disposal of the Buchan Alpha floating facility was successful, resulting in the contract being awarded to the Veolia/Peterson facility on Shetland. This contract will enable them to establish a track record in this emerging market and will be instrumental in attracting further investment in the Shetland facility including the potential for an ultra-deep-water quay to accommodate heavy lift barges to deliver large modules directly onto the yard.

The contract will generate considerable economic value within Shetland supporting up to 35 direct jobs on the site, but also many more throughout the wider supply chain including harbour services, waste processing and disposal crane and lifting hire services, transport, and some fabrication to support the deconstruction work.

