

WELL EXPERTISE

Well Expertise Verification Report

Baker Hughes deliveries to Oselvar PP&A
and Gomez exploration well


AUDITEE Baker Hughes		DATE 01/03/2021	
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DOCUMENT APPROVAL			
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[OSE-DNO-S-RA-0029] Verification Report - Baker Hughes deliveries to Oselvar PP&A and Gomez exploration well

Revision date: 01 March 2021 Rev. 02

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Security Classification	
Open	<p>No consequence</p> <p>Information that has already been published (e.g. on Internet or in brochures) or released for publication by competent unit shall be classed 'Open'</p>
Internal	<p>Negligible consequence</p> <p>Information that may be disclosed to all employees of BU shall be classed as 'Internal'</p>
Restricted	<p>Minor, moderate or serious consequence</p> <p>Information that may only be disclosed to those employees who require such information for performing their tasks (e.g. department, project group) shall be classed Restricted</p>
Confidential	<p>Severe, major or catastrophic consequence</p> <p>Information to which only employees identified by name in a distribution list may have access shall be classed Confidential</p>

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1 Introduction

DNO Norge AS (DNO) will be conducting Permanent Plug and Abandonment (PP&A) on the Oselvar field and drill the Gomez exploration well with the semi-submersible drilling rig Borgland Dolphin with planned start up in end March 2021.

A risk-based approach is applied for follow up of contractors and subcontractors and an audit, review, and verification (ARV) plan has been established to assure DNO that critical activities and services related to the projects are following contractual and regulatory expectations. The main goal is to ensure that DNO, contractors and subcontractors involved in the DNO operations, are competent to perform the activities in a safe and prudent manner.

As a part of the ongoing preparations for the upcoming activities, DNO performed a Verification of Baker Hughes on their planning and readiness related to their scope of work delivery, P&A casing cut and pull including fishing, with the contract reference WE-DP-002.

The verification was conducted 11th of February 2021 on Teams according to agenda and timing given in [Chapter 3](#).

2 Scope of the verification

Baker Hughes was asked to present information to cover the topics listed below:

Scope

1. Short company information/presentation (DNO, Baker Hughes)
2. Quick summary of Management system (Baker Hughes)
 - Management system interface towards rig procedures and processes
 - HSEQ reporting/system
 - Lessons learnt and implementation of lessons learnt, with relevant example(s).
 - Statistics and performance on NCS and Borgland Dolphin in particular
 - Explain issues (if any) and experiences on previous P&A operations (casing cut and pull, casing milling, casing jacking)
3. Service delivery and SoW (Baker Hughes)
 - Personnel
 - Selection of personnel to support DNO for the Oselvar and Gomez projects.
 - Borgland Dolphin specific experience and competence of offshore and onshore personnel
 - Relevant competence and training of offshore personnel.
 - Assurance that the Coordinator is following the projects through.
 - Equipment
 - Please explain internal procedure checking and measuring equipment prior to shipment (sizes, spaceouts, cutters suited for casing type to be cut, etc).
 - Please explain how to ensure equipment availability
 - Please explain how quality control of equipment incl. maintenance, certification is maintained
4. Presentation of Baker Hughes' handling/risk assessments of the COVID-19 pandemic with mitigating measures (Baker Hughes)

Prior to the verification the verification team received the following documentation:

- 2020-2021 IADC Competence Certificate_ Baker Hughes
- Baker Hughes Quality Manual - Index pages - 9 Dec 2020
- BH-HSE-069 (EN) - HSE Management System Manual Rev 1.3
- CWI - Pgs 1 to 2 - Inspection, Testing Methods, and Requirements - GCPM-ITP001 - 4 Feb 2021
- External audits Norway for 2020 to 2017
- SO Multisite Certificate - Baker Hughes - Exp Dec 2023
- Norway Internal Audits from 2020
- Norway UK - 2021 - Internal Audits - 4 Feb 2021
- OFS - pgs 1 of 6 - Competence - QA-GLB-En-100058 - 19 Nov 2020
- OFS - Pgs 1 to 2 - Monitoring, Measuring, and Release of Product and Services - QA-GLB-En-100037 - 4 Feb 2021
- OFS - pgs 1 to 2 - Control of Production and Service Provision - QA-GLB-En-100060 - 4 Feb 2021
- OFS QMS Overview - QA-GLB-En-103182
- WBI org chart NOR

3 Time Plan/Agenda

Time	Agenda
09:00 – 09:15	Presentation of attendees and background for the verification (DNO)
09:15 – 10:15	Presentation of the Management System (Baker Hughes)
10:15 – 11:00	Presentation of Service delivery and SoW- Personnel (Baker Hughes)
11:00 – 11:45	Presentation of Service delivery and SoW- Equipment (Baker Hughes)
11:45 – 12:15	Lunch
12:15 – 13:00	Presentation of Covid-19 handling/risk assessments (Baker Hughes)
13:00 – 13:15	Verification Team Internal Summery (DNO)
13:15 – 13:30	Verification Closure Meeting (DNO/All)

4 Participants

DNO Norge	Baker Hughes
Øystein Prytz – Senior Drilling Engineer & Verification Team Lead	Barry Jones, Enterprise Accounts Director, Norway
Grethe Lønø - Sr. Drilling Engineer	Neil Easton, HSE Leader, Europe
Eirik Enge - HSE Advisor	Jeremy Huthwaite, Quality Leader, Europe
Anniken B. Meisler - HSEQ Coordinator	Magnor Skretting Berge – HSE Res, Norway
	Øystein Meling, Wellbore Intervention Service Delivery manager, Norway
	Klaus Engelskjerd, Business development, P&A Europe
	Astor Eikeland - Sales Engineer Supervisor and Project Manager

Documented participation is shown in [Appendix B](#).

5 Summary

The goal with the verification was to verify Baker Hughes' readiness for the Oselvar PP&A and the Gomez exploration well operations related to the verification scope ([Chapter 2](#)).

The verification was held in good atmosphere, the Baker Hughes participants were very open and willing to explain and share information.

Our general impression is that Baker Hughes is a professional company and ready for the upcoming operations. Baker Hughes will strengthen the deliveries for the DNO operations, especially the stability and experience in the organization where dedicated personnel with minimum 10 years of experience has already been assigned to upcoming activities.

The Baker Hughes Operational System (BHOS), system for tools and experiences, and the handling of Covid-19 incl. the risk assessments stands out as robust.

5.1 Findings

No deviations and no observations were identified in the verification.

5.2 Follow up actions

Some follow up actions were identified in the verification, ref table below. The follow up and closing of these actions will be handled between the contact persons in the companies.

Follow Up Actions	Responsible	Deadline
1. Baker Hughes to forward their reply on EPIM JQS audit finding from 2019 regarding Social Responsibility (grade C)	Baker Hughes	2 nd of March 2021
2. Check Oselvar well data; Baker inhouse vs. data provided by DNO (DONG reports)	Baker Hughes	2 nd of March 2021
3. Share Lessons learned from previous Lundin Field Brynhild (project where WHHs were locked to template)	Baker Hughes	2 nd of March 2021
4. Check of possible interfaces towards Borgland Dolphin	Baker Hughes & DNO	2 nd of March 2021
5. Forward HSE statistics from Norway (2019-21)	Baker Hughes	2 nd of March 2021
6. Forward type of cement used on the Børselv well 7220/6-3 (issues with cutting of WHH)	Baker Hughes	2 nd of March 2021
7. Share presentations from the verification meeting	Baker Hughes & DNO	Done

6 Appendices

[Appendix A](#): Notification letter

[Appendix B](#): "Signature list"

Appendix A – Verification notification

DATE and TIME : 11.02.2021, 09:00-13:30
 WHERE : Online on Teams
 TO : Baker Hughes Norge AS
 ATT. : Barry Jones
 E-MAIL : Barry.Jones@bakerhughes.com
 OUR REF. : Oselvar PP&A and Gomez Exploration delivery verification
 COPY TO : Barry Jones, Arild Lund, Eirik Enge, Einar Framnes, Stein A. Tonning, Bjarne Syre, Morten Laget, Sigve K. Næsheim, Stig Seland, Karina Helle, Anniken B. Meisler, Grethe Lønø
 FROM : Øystein Prytz
 E-MAIL : oystein@wellexpertise.com
 MOBILE : +47 948 30 844

NOTIFICATION OF VERIFICATION CASING CUT AND PULL OPERATIONS AT BORGLAND DOLPHIN

Dear Barry.

As a part of the ongoing preparations for our permanent plugging and abandonment (PP&A) of the Oselvar wells and Gomez exploration well, DNO Norge AS (DNO) plan to perform a Verification of Baker Hughes Norge AS (Baker Hughes) on planning and readiness related to the SoW delivery for Oselvar PP&A and Gomez exploration well, ref Casing Cut and Pull Services RfQ (OSE-DNO-D-TA-0005 Rev.2)

We plan to perform the verification 11th of February 2021 according to agenda and timing given below. The verification will be performed on Teams.

Scope

1. Short company information/presentation (DNO, Baker Hughes)
2. Quick summary of Management system
 - Management system interface towards rig procedures and processes
 - HSEQ reporting/system
 - Lessons learnt and implementation of lessons learnt, with relevant example(s).
 - Statistics and performance on NCS and Borgland Dolphin in particular
 - Explain issues (if any) and experiences on previous P&A operations (casing cut and pull, casing milling, casing jacking)
3. Service delivery and SoW
 - Personnel
 - Selection of personnel to support DNO for the Oselvar and Gomez projects.
 - Borgland Dolphin specific experience and competence of offshore and onshore personnel
 - Relevant competence and training of offshore personnel.
 - Assurance that the Coordinator is following the projects through.

- Equipment
 - Please explain internal procedure checking and measuring equipment prior to shipment (sizes, spaceouts, cutters suited for casing type to be cut, etc).
 - Please explain how to ensure equipment availability
 - Please explain how quality control of equipment incl. maintenance, certification is maintained

4. Please present Baker Hughes' handling/risk assessments of the COVID-19 pandemic with mitigating measures

Timing

11.02.21, online via Teams.

Indicative time plan:

09.00 – 09.15 Presentation of attendees and background for the verification (DNO/Baker Hughes)
 09.15 – 10.15 Presentation of Management summary (Baker Hughes)
 10.15 – 11.00 Presentation of Service delivery and SoW - Personnel (Baker Hughes)
 11.00 – 11.45 Presentation of Service delivery and SoW - Equipment (Baker Hughes)
 11.45 – 12.15 Break/Lunch
 12.15 – 13.00 Presentation of Covid-19 handling and mitigating measures (Baker Hughes)
 13.00 – 13.15 Verification Team Internal Summary (DNO)
 13.15 – 13.30 Verification Closure Meeting (All)

We will take short breaks as convenient

Please send email addresses of relevant Baker Hughes personnel to the undersigned for invitation to this verification activity in Teams.

Request for information

Prior to the verification, and within 04.02.21, the verification team would like to receive the following documentation:

- Relevant QHSE procedures (related to scope)
- Verification reports
 - Audit and verification plan for 2021
 - Internal audits/verifications relevant for Oselvar and Gomez projects (last year)
 - External audits done by 3rd parties (last 3 years)
- Project Specific Organogram
- Project Specific Competence and training documentation
- Procedure(s) for checking and measuring equipment

The verification team

Øystein Prytz
 Anniken B. Meisler
 Grethe Lønø

Lead Drilling Engineer, DNO	Verification Team Lead
HSEQ Coordinator, DNO	HSEQ Auditor
Senior Drilling Engineer, DNO	Participant
HSE Advisor, DNO	

Eirik Enge

Participant

Reporting

The verification team will present a summary with observations and/or improvement items in a closing meeting at the end of the verification. The formal report will be issued within two (2) weeks after the verification.

Please confirm by e-mail (oystein@wellexpertise.com) that date and timing for this verification is OK for required Baker Hughes personnel.

If need for clarifications related to this notification or the verification activity, please contact the undersigned.

Kind Regards,



Øystein Prytz

Verification Team Leader

Well Expertise AS, on behalf of DNO

oystein@wellexpertise.com

+47 948 30 844

Appendix B – Participants, «Signature List»

As the verification was held on Teams, a screenshot of the persons present was taken to document presence.

