

2016 Q3 Wellhead Removal Campaign

Project Overview

Oceanearing successfully completed its annual multi-client wellhead removal campaign in September 2016. The campaign involved three North Sea operators, sixteen wells, and was completed ahead of schedule. We completed additional scopes of work on five wells eliminating the need to mobilize additional project teams and vessels and maximizing efficiencies of the contract model.

The Oceanearing Solution

Given the geographic spread of well locations, the volume of recovered wellhead equipment and seabed debris, and the need to transport structures for subsequent installation, the campaign was completed in two phases (Phase 1: Danish sector, Phase 2: UK and Norwegian sector). The project included two intermediate port calls to offload scrap, load structures, and transfer recovered fluid samples.

The campaign was completed without the use of divers (100% operational success using Oceanearing work class ROVs), guide wires (all deployments used active-heave construction crane), or explosives. Oceanearing used cutting tools and processes, including internal abrasive water jet cutting (AWJC) and external mechanical cutting, which are non-injurious to well integrity and the environment. The campaign used a dynamically-positioned Class 2 (DP2) anchor handling tug supply (AHTS) vessel in lieu of more expensive alternatives.

Beyond the normal scope of wellhead severance and recovery, Oceanearing also completed additional work including the installation of five net guards, the sampling of residual fluids, and the severance and recovery, by dredging and external cutting, of a low-pressure wellhead housing with a rig-deployed, internal mechanical wellhead cutting tool. The housing of this well was buried under a 3 meter cuttings pile.



Highlights

- » Oceaneering integrated project team and services
- » Well data review (all wells were coded SS 0-0-1 (Category 1)) and well-specific work programs
- » OEM equipment interfaces and Oceaneering tooling solutions
- » Vessel charter
- » Design, manufacture, and test of an external AWJC tool solution
- » Management interfaces (operators, vessel, QHSE, emergency response)
- » Hazard Identification and Risk Assessment (HIRA)
- » Offshore project management
- » Dredging, fluid sampling, and wellhead severance and recovery
- » Supply of net guard structures and completion of net guard installation
- » Seabed clearance and survey
- » End-of-well reporting

Key Performance Indicators (KPIs)

Harm to individuals (LTIs)	0
High potential incidents (HiPos)	0
Harm to the environment (spills)	0

Metrics

Quayside (mob, port calls, demob)	2.9 days
Transit	6.9 days
On location	16.6 days
Waiting on Weather (WOW)	0 days

Well Summary Table:

Well Location	Water Depth	Cut Depth (BML)	Wellhead	Casing Program at Cut Depth	Time on Location
Denmark	141 ft / 43 m	3 ft / 1 m	DQ MS-15 MLS (DC)	30 in x cement (dredge and external DW cut)	1.2 days
Denmark	145 ft / 44.2 m	15 ft / 4.5 m	Gray DJ MLS (DC)	36 in x 20 in x 13 3/8 in x 9 5/8 in	2.4 days (SDF)
Denmark	144 ft / 44 m	15 ft / 4.5 m	Vetco MLS (DC)	30 in	0.5 days
Denmark	141 ft / 43 m	15 ft / 4.5 m	Gray DJ MLS (DC)	36 in x 20 in x 13 3/8 in	1.0 days(SDF)
Denmark	150 ft / 45.7 m	15 ft / 4.5 m	Vetco MLS (DC)	30 in	0.4 days
Denmark	124 ft / 37.8 m	15 ft / 4.5 m	Gray DJ MLS (DC)	36 in x 20 in x 13 3/8 in	0.6 days
Denmark	123 ft / 37.5 m	20 ft / 6 m	DQ MS-15 MLS (DC)	36 in x 18 5/8 in x 13 3/8 in x 9 5/8 in	0.6 days
Denmark	142 ft / 43.3 m	15 ft / 4.5 m	DQ MS-15 MLS (DC)	30 in	0.3 days
Denmark	146 ft / 44.5 m	15 ft / 4.5 m	DQ MS-15 MLS (DC)	30 in	0.3 days
Denmark	110 ft / 33.6 m	15 ft / 4.5 m	Vetco MLS (DC)	30 in	0.4 days
Denmark	127 ft / 38.7 m	15 ft / 4.5 m	Gray DJ MLS (DC)	36 in	0.5 days
Denmark	136 ft / 41.5 m	15 ft / 4.5 m	Gray DJ MLS (DC)	36 in	0.3 days
Denmark	240 ft / 73.1 m	15 ft / 4.5 m	DQ MS-15 MLS (DC)	36 in	0.5 days
Denmark	137 ft / 41.8 m	N/A	Gray DJ MLS (DC)	N/A (external DW cut and installed net guard)	0.8 days
Denmark	146 ft / 44.5 m	N/A	Gray DJ MLS (DC)	N/A (installed net guard)	0.1 days
Denmark	111 ft / 33.8 m	N/A	Vetco MLS (DC, FS)	N/A (installed net guard)	0.4 days
Denmark	130 ft / 39.6 m	N/A	DQ MS-15 MLS (DC)	N/A (installed net guard)	0.1 days
Denmark	216 ft / 65.8 m	N/A	SG-1, H4 (DC, PGB)	N/A (installed net guard)	0.6 days
UK	284 ft / 86.6 m	10 ft / 3.1 m	SS-10, H4 (DC, PGB)	30 in x 13 3/8 in	0.5 days
Norway	325 ft / 99 m	0	SS-15 (PGB)	30 in x fish (dredge and external DW cut)	3.9 days
UK	281 ft / 85.6 m	10 ft / 3.1 m	SS-10, H4 (FS, DC, PGB)	30 in x 13 3/8 in	1.2 days

DC: Debris Cap

SDF: Seabed Debris Field

FS: Fluid Sampling

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