

2015 Q3 Wellhead Removal Campaign

Following the successful subcontract subsea well severance operations in 2015 Q2, Oceaneering successfully completed its own integrated 'lead contractor' subsea well abandonment campaign in September 2015. The campaign involved two North Sea operators and was completed ahead of schedule without incidents.

Scope of work

Given the wide spread of well locations, the variable water depths (230-1260ft / 70-384m) and the volume of recovered wellhead equipment, the project was carried out in two phases (phase 1: shallow water, phase 2: deep water) with two intermediate port calls to offload recovered equipment.

Building on our 'no divers, no guide wires, no explosives' wellhead severance methodology, Oceaneering further reduced the vessel equipment requirements by utilizing a vessel without a significant construction crane capability. These reductions in project equipment continue to show significant cost savings for operators without compromising operational safety or efficiency.

Beyond the normal scope of wellhead equipment recovery and wellhead severance (see Well Summary Table), Oceaneering was requested to undertake, and successfully achieved, the recovery of one wellhead at 26ft (8m) below the mudline (BML).

Scope of Supply

- » Oceaneering integrated project team
- » Oceaneering integrated services
- » Well data review (all wells were coded SS 0-0-1 (category 1))
- » Well specific work programs
- » OEM equipment interfaces and Oceaneering tooling solutions
- » Vessel charter (Island Vanguard)
- » Management interfaces (operators, vessel, QHSE, emergency response)
- » Hazard Identification and Risk Assessment (HIRA)
- » Offshore project management
- » Wellhead severance (Oceaneering Abrasive Water Jet Cutting)
- » Seabed clearance and survey
- » Wellhead disposal
- » End of well reporting



Key Performance Indicators (KPIs)

No harm to people (zero LTIs)	0
No high potential incidents (zero HiPos)	0
No harm to the environment (zero spills)	0

Metrics

Quayside (mob, port calls, demob)	6 days
Transit (2100 NM)	7.8 days
On Location	12 days
Waiting on Weather (WOW)	0.2 days

Well Summary

Well Location	Water Depth	Cut Depth (BML)	Wellhead	Casing Program	Cut CSA	Time on Location
Norway	366ft (111.5m)	10ft (3m)	MS-700, H4 (PGB)	30in x 20in	183.3in ² (4655.8mm ²)	1.4 Days
Norway	365ft (111.4m)	10ft (3m)	MS-700, H4 (DC, PGB)	30in x 20in	194.0in ² (4927.6mm ²)	0.6 Days
Norway	365ft (111.4m)	10ft (3m)	MS-700, H4 (DC, PGB)	30in x 20in	182.6in ² (4638.0mm ²)	0.6 Days
Norway	367ft (112m)	10ft (3m)	MS-700, H4 (DC, PGB)	32in x 20in	237.5in ² (6032.5mm ²)	1.3 Days
Norway	365ft (111.4m)	10ft (3m)	MS-700, H4 (DC, PGB)	30in x 20in	194.0in ² (4927.6mm ²)	1.5 Days
Norway	364ft (111m)	10ft (3m)	MS-700, H4 (PGB)	30in x 20in	182.5in ² (4635.5mm ²)	0.5 Days
Norway	360ft (109.6m)	10ft (3m)	MS-700, H4 (DC, PGB)	30in x 20in	194.0in ² (4927.6mm ²)	0.5 Days
Norway	450ft (137m)	26ft (8m)	UWD-15, H4 (PGB, TGB)	36in x 20in	273.3in ² (6941.8mm ²)	0.8 Days
Norway	1027ft (313m)	10ft (3m)	SS-15, H4 (PGB)	30in x 20in	183.3in ² (4655.8mm ²)	1.2 Days
Norway	1260ft (384m)	10ft (3m)	SS-15, H4 (NG)	30in x 20in	183.3in ² (4655.8mm ²)	0.7 Days
Norway	1109ft (338m)	Seabed inspection only				0.2 Days
Norway	1089ft (332m)	10ft (3m)	WS-II, H4 (DC, PGB)	30in x 20in	178.3in ² (4528.8mm ²)	0.6 Days
Norway	998ft (301m)	10ft (3m)	UWD-15, H4 (TS)	30in x 20in	183.3in ² (4655.8mm ²)	0.9 Days
UK	282ft (86m)	8.2ft (2.5m)	SS-15, H4 (PGB, PMC)	36in x 20in	273.3in ² (6941.8mm ²)	0.6 Days
Norway	230ft (70m)	10ft (3m)	SS-15, CIW Hub (CM, NG)	30in x 20in x 13-3/8in	193.6in ² (4917.4mm ²)	0.6 days

PGB: Permanent Guide Base
DC: Debris Cap
TGB: Temporary Guide Base
NG: Net Guard

TS: Template Structure
PMC: Previous Mechanical Cuts
CM: Concrete Mattresses

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