

# EQUINOR VESLEFRIKK 24 WELL PP&A CAMPAIGN

ASV Removal / Casing & Tubing Cut & Recovery / Milling / Wellbore Clean-Up / Hanger Recovery

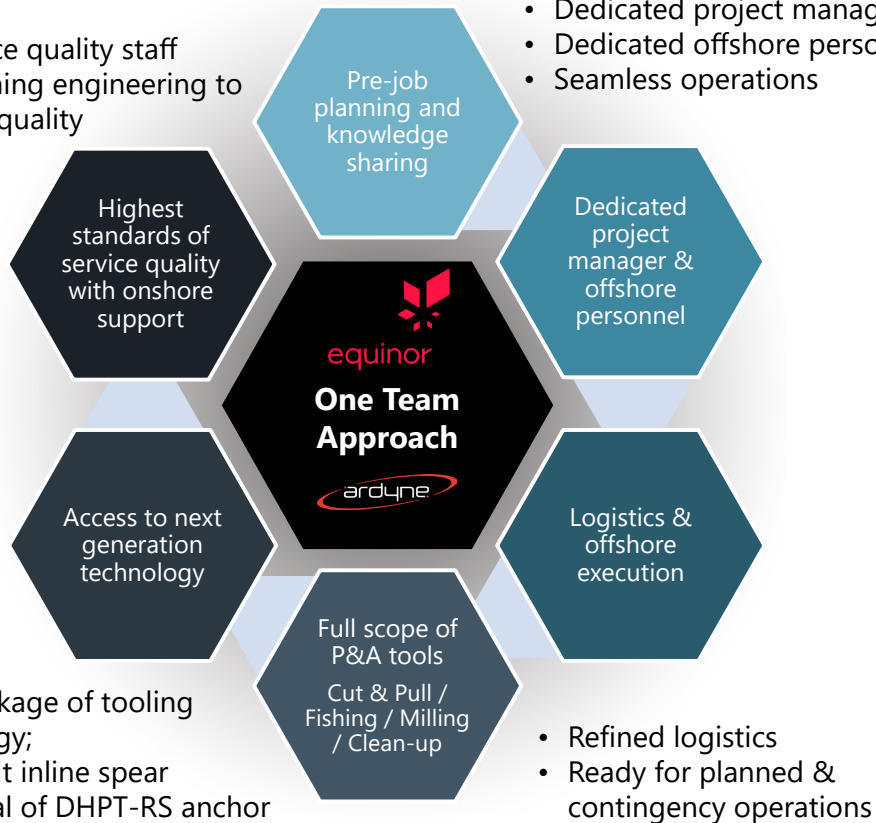


Equinor required a provider for the permanent plugging and abandonment of 24 wells on their Veslefrikk A Installation.

This included operations to pull tubing alongside ASV retrieval, cut & recover production and intermediate casing strings as well as milling subsea hangers on two of the wells.



- Dedicated service quality staff
- In-house sustaining engineering to support service quality
- Drive quest for zero injuries, zero damage to equipment or personnel, and zero NPT



"Ardyne has greatly contributed to the success of the 24 well Veslefrikk PP&A campaign, by delivering services to the highest HSE & efficiency standards.

The use of dedicated personnel & close cooperation between the companies to optimise equipment selection, operational procedures & risk assessments have resulted in impressive operational results, without any serious HSE incidents or personnel injuries, with the fastest P&A operation completed in only 7.5 days."

**Stephen Stragiotti, Equinor D&W Operation Centre Lead**



# EQUINOR VESLEFRIKK 24 WELL PP&A CAMPAIGN

Team - Technology - Service Quality



## TEAM

The 'One Team Approach' ensured continuous smooth operations where everybody understood what was required.

Experienced P&A professionals involved from start to completion.



## ARDYNE TECHNOLOGY

The full suite of Ardyne designed downhole tools were utilised during the 24 well campaign.

This included new technology developed specifically to aid the recovery of ASV's during this campaign.



## SERVICE QUALITY

During the 17 months of P&A operations and over 2,800+ hours below rotary, only 45 minutes downtime was recorded, with no injuries to personnel, **delivering an efficiency of 99.97%**

Ardyne service quality is supported by our in-house sustaining engineering team.



**NORTH SEA PP&A CAMPAIGN - 2.5 YEARS, 24 WELLS**  
Supplying the full range of fishing, milling & cutting services including bespoke solutions for ASV removal

The services cover, but are not limited to:

- Fishing
- Coring Cut, Jack & Pull
- Section Milling
- Coring Milling
- Subsea Coring Hanger Milling
- Coring Clean Out
- Plastic Production Factor & Liner Hanger Removal
- ASV Removal

The workscope includes a bespoke tooling / project plan to remove 27 ASV's during the 24 well campaign.

**Manager Offices**

The first two wells were successfully completed in February 2021, with further operations ongoing for the next two & a half years.

Ardyne are committed to providing our clients with comprehensive Full Service PP&A support for all well scenarios.

[Click to View Full Service PP&A Flyer](#)

[Click to View Full Service PP&A Flyer](#)

[Click to View Ardyne Tubing Packer Spear](#)

**NEW TUBING PACKER SPEAR DESIGNED, BUILT & RUN IN 69 DAYS**  
Designed to back off & recover tight fish with an easy set / release mechanism

**Operational stages:**

1. Apply pressure of 14 tonnes to the string
2. Retract string by 100mm
3. Increase pressure to 20 tonnes
4. Retract string by 100mm
5. Increase pressure to 25 tonnes
6. Retract string by 100mm
7. Increase pressure to 30 tonnes
8. Retract string by 100mm
9. Increase pressure to 35 tonnes
10. Retract string by 100mm
11. Increase pressure to 40 tonnes
12. Retract string by 100mm
13. Increase pressure to 45 tonnes
14. Retract string by 100mm
15. Increase pressure to 50 tonnes
16. Retract string by 100mm
17. Increase pressure to 55 tonnes
18. Retract string by 100mm
19. Increase pressure to 60 tonnes
20. Retract string by 100mm
21. Increase pressure to 65 tonnes
22. Retract string by 100mm
23. Increase pressure to 70 tonnes
24. Retract string by 100mm
25. Increase pressure to 75 tonnes
26. Retract string by 100mm
27. Increase pressure to 80 tonnes
28. Retract string by 100mm
29. Increase pressure to 85 tonnes
30. Retract string by 100mm
31. Increase pressure to 90 tonnes
32. Retract string by 100mm
33. Increase pressure to 95 tonnes
34. Retract string by 100mm
35. Increase pressure to 100 tonnes
36. Retract string by 100mm
37. Increase pressure to 105 tonnes
38. Retract string by 100mm
39. Increase pressure to 110 tonnes
40. Retract string by 100mm
41. Increase pressure to 115 tonnes
42. Retract string by 100mm
43. Increase pressure to 120 tonnes
44. Retract string by 100mm
45. Increase pressure to 125 tonnes
46. Retract string by 100mm
47. Increase pressure to 130 tonnes
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