

Assure Your Wellhead Integrity Ahead of the Decom Countdown

Verifying near-surface integrity at the start of Phase 0 P&A operations helps to avoid unplanned cost, risk and downtime.



Wellhead Integrity Verifica

Unity is Europe's largest provider of well and wellhead integrity solutions



We have successfully conducted abandonment work for multiple operators on 240+ wells, with 100+ planned.

Our team of highly skilled technicians are experienced in all makes and models of OEM equipment.

We hold a full range of wellhead components in stock, our own QV range of spares and a wide range of well testing and pressure control equipment.

Our unique, proprietary range of compact, high-performance technology fills a gap in the market and improves our clients' project efficiencies.

When standard solutions are not the answer, our team of in-house engineers are able to quickly solve complex challenges. Examples include the provision of lock open tooling for actuators or the supply of running and retrieval tools for tubing or casing hangers when original equipment manufacturer versions become obsolete or unavailable.

Wellhead Integrity Verification

Our wellhead integrity verification programme is designed to ensure your surface well equipment is fully prepared for P&A operations.

This preparatory work is critical to avoid the significant costs associated with unplanned downtime during later rig based P&A operations. It is ideally undertaken at the start of Phase O abandonment work and is performed off the critical path to avoid impacting ongoing operations.

The P&A Roadmap



Unity Decom Support

Phase 0

Preparatory Work

Initial wellhead integrity verification delivers value throughout the decom process.

- Saves unplanned costs
- Reduces risk and downtime
- Reduces man hours and resources
- Identifies hazards for safer decom

Well Decommissioning Timeline

Phase 1

Reservoir Abandonment

Phase 2

Intermediate Abandonment

Phase 3

Wellhead & Conductor Removal

Unity Decom Wellhead Integrity Verification Risk Planning Scenarios

A full health check of your wellhead and near-surface equipment is critical prior to P&A operations to avoid unplanned downtime from these potential events:

- Actuator failure can result in wireline being dropped in the well, fishing operations and days of downtime
- ✓ Inability to access tubing tree valves may not be fully open even when they appear to be externally. Scale or blockages may result in costly remedial work
- ✓ Tree valve failure prevents rigging up onto well

- Corroded fittings, seized tiedown bolts and inoperable valves can be hidden issues that cost days of downtime
- ✓ Seized bolts or flanges can prevent equipment being disassembled during online operations, resulting in additional equipment and machinery being mobilised

Our expert team will discuss all potential scenarios with you and ensure mitigation plans are in place for all eventualities.

Wellhead Integrity Verification

Project Managed
Unique Technology
Solutions

Each of these stages is fully project managed by a single Unity contact who provides detailed data and evidence reporting on the integrity of your near-surface equipment, plus recommendations for remediation work.

Repair and maintenance work is complemented by a range of unique technology solutions to improve efficiency and reduce cost and risk.



Annulus Integrity Verification

Our annulus verification ensures the A,B and C annuli and associated components are in good condition and free of integrity issues which could impact later operations.



OUR WORK PACK INCLUDES:

Remote digital monitoring Pressure / Temp / Fluid level

Annulus bleed offFluid sampling / Microbial analysis

Annulus top ups

Annulus valve Test / Remove / Repair / Install

VR plug condition Test / Replace / Install

Annulus Leak DetectionFiberLine Intervention



TECHNOLOGY SUPPORT

Unilogger
Hiber Hilo
CVR tool
ALF
Well-SENSE FiberLine Intervention



Barrier Verification



Condition & Access Verification

Barrier verification assesses the internal and external condition of the Xmas Tree and all individual parts.

OUR WORK PACK INCLUDES:

Tree

Full integrity assessment, fabric maintenance, bolt maintenance, sealant injection

Actuators

Inspect / Test / Repair / Replace

Tree valves

Inspect / Test / Maintain

Tie down bolts

Inspect / Replace

Condition and access verification evaluates internal and external access to the well via the Xmas Tree and around the wellbay to ensure there are no obstructions.



OUR WORK PACK INCLUDES:

Close visual inspection of internals, removal and installation of tubing hanger plugs, crown plugs etc.

Physical tubing check / drift run

Verify a clear path through the tree, tubing hanger and first production tubing section.

Visual and digital verification

Camera and caliper, casing inspection tool, tubing wall thickness data, depth / time log file.

Data analysis to determine remedial work Scale removal, plug set area, nipple profile

Well bay access log

Full survey of well bay area to identify and remediate any access hazards.



SIS CSS

Plugs

Memory camera Memory caliper



TECHNOLOGY SUPPORT

QV spares QV actuators Unilogger Tiedown bolts Additive manufactured parts

Surface Intervention System & Compact Shear-Seal BOP

40,000lb Pull 70,000lb Push 40% Lighter

A compact, lightweight and powerful intervention system with 40,000 lbs pull and 70,000 lbs push which performs multiple shallow operations including plugging, isolation, inspection and clean-out.

The SIS installs and removes bridge plugs, BPV/TWCV's, hanger profile plugs and isolation sleeves. It also provides a rigless deployment method for drift runs, camera and caliper inspections and lead impression block runs.

Our compact surface BOP is 40% lighter than conventional designs, suitable for tight spaces and low lift capacity. It cuts SIS rods, coil to 2-7/8" and wire and is field redressable.

Unity Technology to Support Decommissioning

Surface Intervention System

Compact Shear-Seal BOP valve

Replacement actuators

Annulus Lubrication Filling valve

Compact Valve Removal tool

Tie down bolts

Bridge plugs

Additive manufactured parts

QV spares

Suspension flanges



Unity is Europe's largest provider of well and wellhead integrity solutions

240+

well abandonment projects

80+

offshore technicians

10 +

innovative decom technologies

100%

experienced in all makes and models of wellhead equipment 75%+

of all European operators supported

20

years of operating experience





+44 (0)1224 937 600 enquiries@unitywell.com Unitywell.com Wellheads Industrial Estate Dyce, Aberdeen AB217GA United Kingdom

