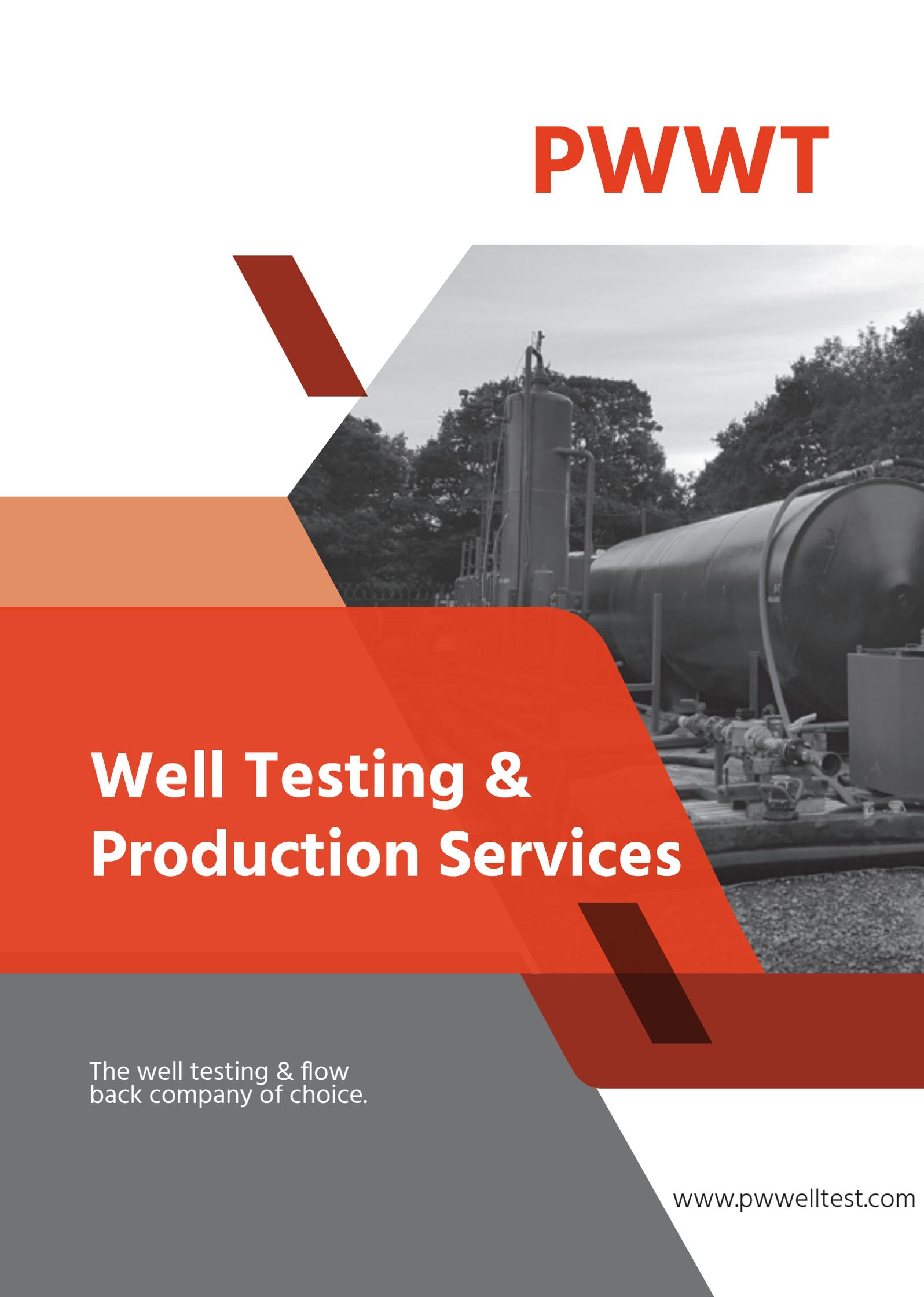


PWWT



Well Testing & Production Services

The well testing & flow
back company of choice.

www.pwelltest.com

A UK based international service provider offering specialist well testing, flowback & production services.

About

PWWT



PW Well Test (PWWT) are UK based international service provider specialising in the provision of well testing, flow back & petroleum engineering services to clients within the oil & gas sector.

Established in 2014 by a team of experienced professionals PWWT offers a wide range of high quality plant, equipment & competent personnel to onshore operators whilst providing a safe, robust & thorough service.



Executive Management

Our workforce is our most valuable asset. It is the skills and competencies of our people that our clients value; our ability to deliver precision data, on time and on budget.

John Palmer Managing Director

John Palmer started in the oilfield in 1978 working up the ranks from a Roughneck to a Tool pusher, acquiring hands on experience and man management skills. Mr Palmer has international experience working as Drilling supervisor for Shell in Oman in 1999. Since 2000 Mr Palmer set up P W Well Services Ltd, and today is now the market leading onshore UK well servicing contractor. Mr Palmer brings a wealth of experience, expertise and insight to the organisation and is responsible for overseeing contracts, projects, logistics and operational management.

Tony Jones Senior Well Test Manager

Tony Jones started in the oilfield in 1978 working his way up from grassroots to Operations Supervisor in 1986. He has extensive international experience including projects within Holland, Italy, Greece, Kazakhstan, Angola, Ghana, Saudi Arabia, Dubai, UAE, Saudi Arabia and UK etc. Before joining the organisation, Mr Jones was the Well Test Operations Manager for Expro UKCIS. Mr Jones bring a vast array of skills and experience to our team and is responsible for planning projects, contractual negotiation and business development.

Wesley Bone Operations Director

Wesley Bone serves as Operations Director for PW Well Test Ltd. Mr Bone responsibilities include strategic and operations planning, financial oversight and management training. Mr Bone brings over 10 years of industry experience to the organisation with onsite and executive management experience in the upstream oil and gas sector.

Andrew Ellis Well Test Superintendent

Andrew Ellis serves as Well Test Superintendent for PWWT. Mr Ellis brings over 29 years of international industry experience in the field to the organisation with a customer focused, efficiency-based leadership. Responsibilities include strategic and operations planning, and equipment design reviews. With his expertise he has been instrumental in the development of PWWT.



Services & Capabilities

PWWT specialises in a host of field services including well testing and flowback provision, well integrity, and well petroleum & production engineering. PWWT partners with its clients to optimise initial production performance. Well testing and flowback are an integral part of the overall production of an oil and gas project and our services is dedicated to using the highest quality plant & equipment, competent personnel and an Integrated Management System that supports managing the risks associated with our operations.

At PWWT, we have diverse fleet of equipment along with the knowledge to effectively treat each wellbore as its own specialised and unique project. In addition to the equipment and personnel, our well testing services would not be complete without precision data. All our operatives are suitable and sufficiently trained to the highest standards and can use the latest communication equipment. This provides our clients with immediate access to on-demand data coming directly from the field, as well as data analysis and reporting.

We have established our systems and processes to offer our clients the very best service by ensuring that all projects are completed with reliable, accurate and precise data.

Flowback Equipment Provision Services

Drill Stem Tests (DST)

Extended Well Tests (EWT)

Production Allocation & Routine Well Testing

Post Completion, Stimulation Flow Back & Well Clean Ups

Early Production Systems

Frack Job Drill-Outs

Frack Flowback

Underbalanced Drilling Flow Control

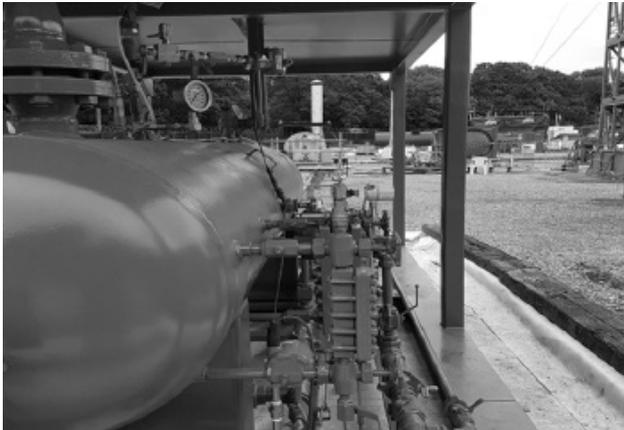
Well Test Equipment Supplies & Rentals

Controlled Well Kills & Depressurisation

Flare Supply & Operation

Hot Oiling

Horizontal Separators



PWWT can supply both four and three phase separators. The separator is an instrumented vessel designed to efficiently separate effluent into three phases for onshore and offshore well testing.

The separator typically consists of a vessel, an oil flow-measuring system with dual meters, a flow-measuring system for gas, several sampling points for each effluent phase, and two relief valves to protect the vessel against over pressure.

The separator is fitted with a deflector plate, coalescing plate, a foam breaker, a vortex breaker, weir plate, and a mist extractor.

Choke Manifolds

The choke manifold is used to reduce well pressure and control the flow rate before the flow enters the processing equipment.

PWWT's standard choke manifolds are component designs consisting of four, five or eight manual valves. Positioned on one side of the flow path, an adjustable choke allows variable flow control for flexibility during clean-up. On the other side, a fixed orifice allows a more accurate flow control for predetermined flow rates. The choke allows the operator to control the well flow by enabling progressive manual, powered, or fixed control of the well stream by opening, closing or selecting a fixed orifice. Well parameters such as pressure and temperature can be monitored through ports positioned upstream and downstream of the manifold. A number of choke manifold configurations and sizes are available for different pressures and temperatures to suite specific requirements and well conditions. Both single and dual isolation valve arrangements can be supplied.



PWWT recommend a double barrier policy between process fluids and the atmosphere when changing chokes in harsh environments, such as sand clean-up and high-pressure applications. There are also variations to the adjustable choke make and type. The larger bore units and high-pressure manifolds have a production choke installed rather than the traditional needle and seat type. We can also incorporate our PowerChokes® adjustable choke, designed for severe service environments.

Surge Tanks

The pressure containing surge tank allows more versatility within the test installation than atmospheric designs.



The pressure rating of the vessel is useful during handling of sour crudes and when used as a holding vessel or for proving meters during the test. No venting to the atmosphere takes place under normal conditions. The units contain required valves for flow and bypass applications and all required pressure relief and control devices. Surge tanks are designed for three working pressures with added features to ensure versatility for various process applications. They are manufactured for various volumes, and they may be made with twin compartments.

Both compartments of the surge tank are equipped with sight glasses and calibration strips.

PWWT surge tanks are equipped with steam heat coils to provide the required heat for the heavy crude.

The surge tank can be used as a second stage, two-phase separator with the addition of necessary gas, fluid meter, and control valves. It is very effective where a longer retention time is needed for good separation of gas and fluids.

Features & Benefits

- Single or dual compartment
- Steam heated coils in each compartment
- Tank is pressurised, so no gases are vented to the atmosphere near the well test equipment
- Assists in additional separation and can be used as a 2nd stage separator
- Standardised box beam frame design incorporates ISO corner blocks and DNV-compliant lift points
- Conforms to all industry standards related to vessel, piping, valves and service
- High and low-level alarm on each compartment

Sand Filter Packages

PWWT have a range of options for Wellhead Desander's to remove solids from Gas Wells.

The wellhead desander is designed to be deployed close to the wellhead and upstream of the first well control device, usually a choke manifold allowing solids to be removed at higher pressure and therefore lower velocity.

The well flow is directed tangentially into the internal deflector assembly. The resulting spinning effect forces the heavier solids to the wall of the vessel. As the solids lose energy they fall because of gravity and are collected in the bottom of the vessel.

The solids free gas is extracted from the centre of the deflector assembly and through the overflow outlet at the top of the vessel.

The vessel can be isolated from the incoming gas flow and the accumulated solids flushed out of the vessel by pumping water into the vessel flush connection and recovering the solids from the vessel drain.

For maximum effectiveness, the units would usually be deployed in tandem and used on a standby/duty regime to allow continuous solids removal.

Alternative configurations may include the use of PWWT proven adjustable choke, connected to the vessel drain to control discharge from the vessel. The unit is manufactured to ANSI, API, PED and NACE specification for use in all service environments.

Features & Benefits

- Low back pressure design permits high flow rates
- Double valve isolation of desander vessel
- Fitted with a bypass line to enable isolation
- Flush removal of accumulated solids, no containment break required to empty units
- Removable, hard faced deflector insert
- Drain line can be retrofitted with PWWT adjustable choke



Well Integrity Services:

- Well integrity management systems (WIMS)
- Production tree/wellhead maintenance and valve testing
- Remedial well integrity solutions



Well Petroleum & Production Engineering:

- Production technology & engineering
- Well test design, analysis & interpretation
- Management of extended well test & flowback project operations
- Completion/workover design, procedures & operational management
- Production & injection well optimisation
- Artificial lift design and installation
- Operational well programme writing & field supervision
- Project & field operations management

We also offer; personnel including well test operators, wellsite supervisors & petroleum engineers, regulatory support, independent well examination services & expert technical consultation.

Key Features & Benefits:

- Highly qualified & competent personnel who have extensive international experience
- Plant & equipment are designed in accordance with API standards and European Directives
- Well Test Supervisor have valid IWCF certification
- The PW Integrated Management System is accredited to ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007
- Safe system of work onsite and the proactive use of safety tools
- Engagement with regulators and other interested third parties
- Units are suitably maintained, inspected and certified
- Provision of technical assistance to the programme of works
- All projects are supported by our management team offsite
- Equipment is suitable for harsh environmental conditions such as the presence of hydrogen sulphide (H₂S) and carbon dioxide (CO₂)
- Competitive prices available to our clients

Research & Development:

PWWT have invested resources in collaboration with landfill systems to bring to the UK land market. The new range of enclosed EWT 9.5 flares bringing together the latest enclosed clean incinerator technology and operational well testing experience to deliver Best Available Techniques 'BAT' as set out by the UK Environment Agency's Onshore Oil & Gas Sector Guidance.

Long Standing Customer Relations

Within the PW Group we have an excellent reputation within the onshore oil and gas industry and endeavour to build upon our, professional, long lasting and transparent relationships with our clients.

From humble beginnings PW has grown rapidly to become the leading provider of well service and well test solutions in the UK, The company it is today providing comprehensive and reliable solutions for small independent Operators as well as global blue-chip companies.

Some of our clients include, but not limited to the follow:



ISO Accreditation



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PWWWT

P W Well Test Ltd is registered in England and Wales, No. 9145204

