



# COMPANY **PROFILL**



RC 1620266

*...excellence in safety and quality service delivery*

# TABLE OF CONTENT

---

- *Introduction*
- *Core Values*
- *Company Structure*
- *Human Development*
- *Our Services*
- *Our System*
- *Meet Our Team*
- *Our Clients*

## INTRODUCTION

Houston Well Services Limited is a Nigerian company established on 2<sup>nd</sup> October 2019 to provide Drilling and Well service operations. The Company is owned and managed by highly skilled and experienced Nigerian professionals in oil and gas field operations. Our Engineers are well-trained to provide quality and efficient Drilling and Well services in oil and gas field of any environment. With our head office in Port Harcourt, we are positioned to provide the following services;

- Drilling (MWD/LWD/DD) Services,
- Well Completion services
- Hoisting and Rig operation,
- Casing and Tubing Running,
- Technical Manpower Supplies.

As experts in oilfield services and integrated project management, our extensive skills encompass all aspect of planning and operations including well operations management, oilfield services, rig contracting and management, well site supervision, project management procurement and logistics



# MISSION STATEMENT



To become the oil service company of choice through continuous delivery of best-in-class services of our clients in a safe cost efficient and timely manner.



# VISION STATEMENT

To be an oilfield service provider of choice delivering quality services to our client through efficient utilization of highly trained and experienced local and international best-in-class oilfield technologies.



# OUR CORE VALUES

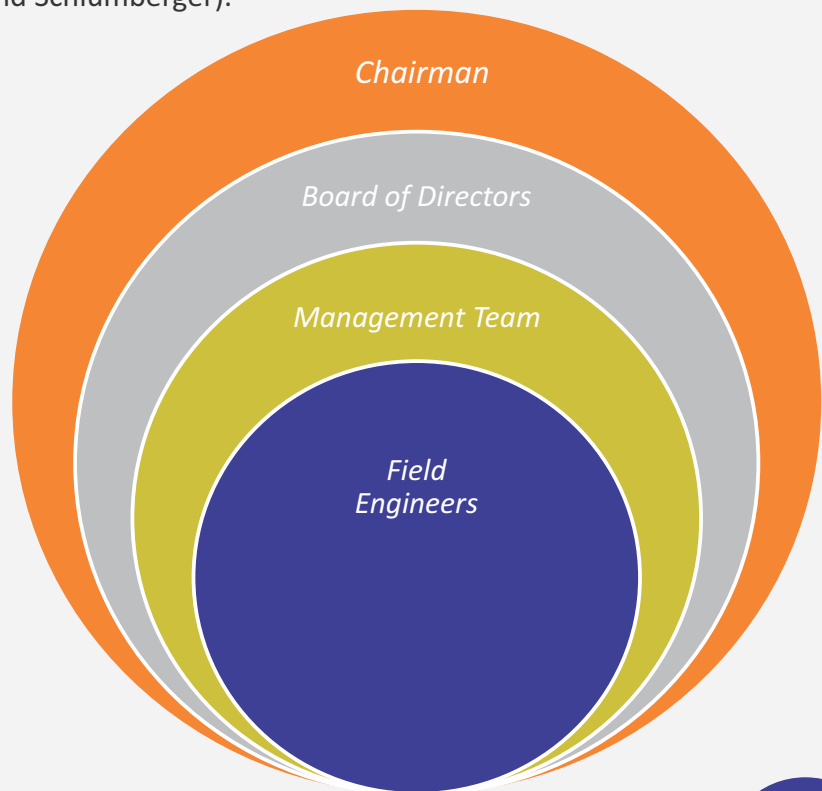
Our core values are;

- Mutual Respect,
- Integrity,
- Team Work,
- Transparency and
- Continuous Learning.

# COMPANY STRUCTURE

Houston Well is governed by a board of directors who are seasoned oil and gas experts made up of ex (BakerHughes, Halliburton and Schlumberger).

## The Hierarchy:



Business Standards and Ethics



Corporate Governance



Community



Environment



Safety and Security

Houston Well Board, Management and Staff members are committed to the highest standard of corporate responsibility. our approach to corporate responsibility comprises five main components

HWSL Business and ethical standards are fundamental to work practices, hiring, Training and business conduct guidelines and ethical and legal standards.

HWSL is governed by BOD which is responsible for appointing the executive officer - Managing Director, Policy approval and major capital. The MD has the power to manage the company on daily base and takes some major decisions.

We are dedicated to making dreams of families and children a reality through public initiatives and community outreach

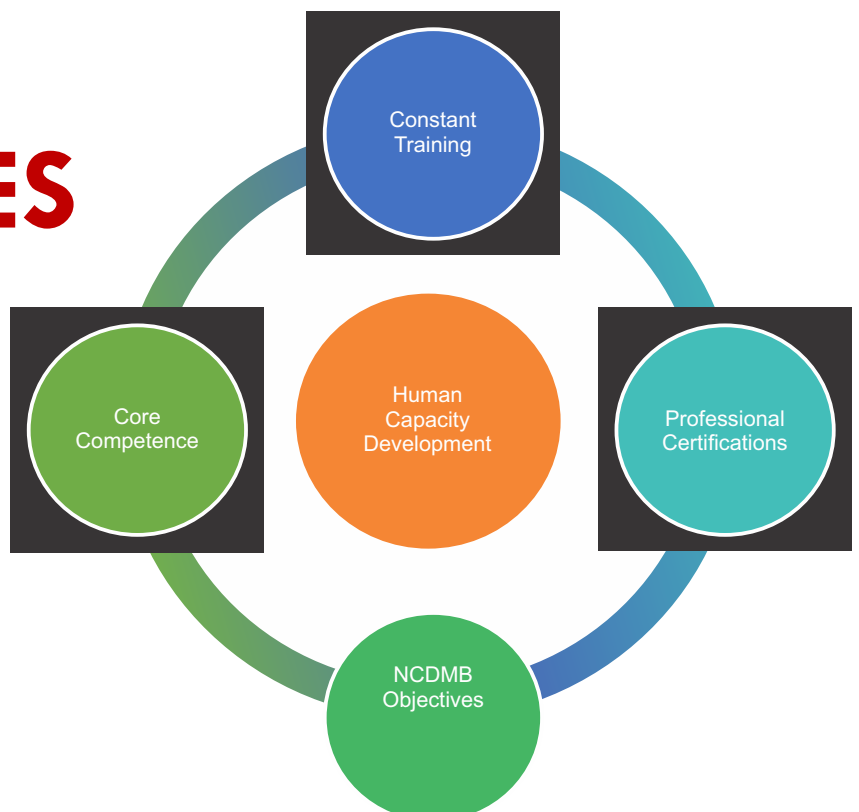
We are committed to balancing environmental stewardship with its corporate goals and operation worldwide

Management's ultimate responsibility



# HWSL PERSONNEL DEVELOPMENT OBJECTIVES

From the inception of engagement, HWSL makes it a priority to ensure personnel is capable of representing her in all facet of clients projects hence training programs are inevitable







## HWSL PERSONNEL

# OUR SERVICES



## **Vector Downhole Motors**

Our ERT power sections matched with our shorter bit-to-bend

### **Drilling Services**

- Directional Drilling.
- Drilling Engineering Consultancy.
- Measurement and Logging While drilling (and Formation Evaluations)
- Gyro Survey (Multi and single shot Survey).
- Casing Running
- Cementing Operation

*HWSL Directional Drilling services* are manned by highly skilled and experienced Nigerian Directional Drillers, we present to our clients wide-ranging experience to their Directional Drilling Operations. Our Board members have over 25 years of professional field and management of Directional Drilling experience acquired with the International Oil Service companies (IOSC) and Consultancy with Major Oil and Gas producers. These wealth of experiences are brought to HWSL for efficient and effective service delivery to our clients.

HWSL has a fleet of NOV Drilling Motors ranging in specification from low speed – high torque, high speed - low torque to achieve drilling applications.

### **Vector Series 50 Drilling Motor**

The Vector Series 50 drilling motor provides strength and reliability with a short bit-to-bend, allowing superior directional performance and the ability to drill a curve and lateral in a single run.

[Vector™ Series 50](#) platform provide a robust, high-torque motor that aids in better directional control

The Vector™ Series 50 drilling motor incorporates the next-generation universal joint design, which features torque-transferring faces and a driveshaft that is up to 25% larger in diameter. The larger driveshaft enables the motor to provide exceptional torque capability and reliability. Combined with 100% flow-through-the-bit technology, this allows for maximum drilling efficiency. The short bit-to-bend bearing pack features an oil life equivalent to our previous full-length assemblies, providing the ability to reach total depth (TD). A locking feature prevents the adjustable assembly from being set incorrectly on the rig floor, reducing downtime at the rig.

### **Benefits**

- Faster drilling – Designed to achieve high rate of penetration (ROP)
- Shorter bit-to-bend – Allows for superior directional performance
- Increased strength – 35 to 68% stronger than previous-generation motor technology
- Extreme durability – Redesigned internally, connections minimized, and components mechanically locked
- Locking feature – Bend angle cannot be set incorrectly on the rig floor

### **Applications**

- High torque
- Interbedded or hard formations
- Curved
- Lateral
- Vertical

### **Drilling Motor Service and Maintenance**

HWSL has capable and well trained maintenance engineers that ensure drilling motors are well serviced and ready for deployment to the rig.

We have lots of downhole tools for BHA configuration which ensures hole stability.



### ***Torque Master Machine***

Our 8026 Torque Master is designed with safety and efficiency in mind, the Torque Master takes care of our tools so we can maximize the results of our clients drilling operations.

This breaker unit is a self-contained freestanding hydraulically powered unit designed for fast and accurate makeup or breakout of threaded connections on drilling tools, tubular, and related equipment.

The breaker's flexibility enables our workshop personnel to adjust bottomhole assembly (BHA) and/or tool configurations on-the-fly and to respond more quickly and more effectively to changes required by our Directional Drillers. And by providing accurate information, the unit ensures our critical connections are torqued to their required values and minimizes the possibility of a connection backing off downhole.





Drilling Engineering Consultancy.



Short Drill Collar

Non - Magnetic Drill Collar



Assembled tools on rack and troy at base facility ready to be deployed to client

We utilize Directional Drilling software for our Directional Well Planning. This software is an industry first class application utilized by our Drilling Engineers to plan Wells for our clients. Directional Drilling is the practice of deviating a wellpath to a target located at a lateral distance and direction from the vertical. The practice requires trajectory control and precise well placement using many advanced tools and equipment that includes rotary steerable systems, mud motors, LWD and MWD, etc.

COMPASS™ software is an engineering computer programs. These programs normally belong to 2 groups: tubular mechanics and hydraulics. Tubular mechanics models calculate the torque and drag, buckling, hook load, etc. Hydraulics models involve drilling fluid, pressure drop, cutting carrying capacity, etc.

COMPASS™ software is the industry's premier application for well path planning, survey data management, torque and drag analysis, cost and re-entry optimization, plotting and anti-collision analysis enabling our engineers to steer the bit and hit targets bull's eye.

COMPASS™ software packages streamline time-critical decisions to accurately drill extended-reach, horizontal, vertical, and complex directional wells and sidetracks.



## PLOTTER FOR PLOTTING WELL PLAN

HP DesignJet T830 Large Format Multifunction Wireless Plotter Printer - 24", with Mobile Prinrinting (F9A28A)



## Measurement-While-Drilling Tool

Our **MDW/LWD** Engineers have worked in various environment of operation, with exceptional world class experience, they are capable of delivering all job scenario with little or no support from base.

Monitor wellbore quality and drilling dynamics through real-time data.

M/D Totco's™ BlackStream™ measurement-while-drilling (**MWD**) tool is a collar-based downhole drilling dynamics measurement tool that combines the capabilities of the BlackStream enhanced measurement system (EMS) tool with a direction and inclination probe to provide real-time measurements of both drilling dynamics and wellbore quality.

In addition to the standard set of EMS measurement sensors, the tool also includes channels such as inclination, azimuth, gravity tool face, magnetic tool face, and gamma. This combination of tool provides valuable data to help determine borehole quality and curve build rates in real time with no loss of time compared to traditional surveys.

The tool is designed to connect to the IntelliServ™ networked drill string, providing real-time data at rates up to 80 Hz.





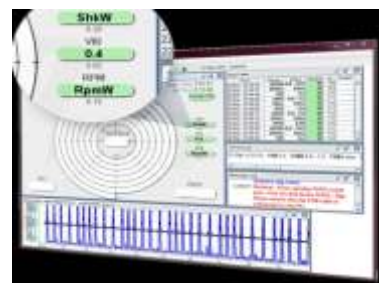


Our Tolteq™ iSeries near-bit sub (iNBS) tool connects with the Tolteq iSeries mud-pulse measurement-while-drilling (MWD) platform for real-time data transmission. Providing continuous inclination and azimuthal gamma images with up to 16 sectors available in real time, the iNBS tool enables accurate well placement even in the thinnest of reservoirs. As the shortest near-bit measurement sub on the market, the iNBS tool ensures steerability when run below a motor.

The iSeries GUIDE measurement-while-drilling (MWD) surface system is a complete, field-proven wellsite solution. The GUIDE system is the most compact and portable surface system available, enabling setup times of less than 20 minutes. Powerful and intuitive software drives optimized decoding and well archiving with a customizable main screen and automated WITS capability that ensures ease of use. Four configurable while-drilling sequences, in addition to the survey sequence, let the user determine exactly what needs to be displayed; in addition, automatic switching between sequences eliminates the concern of receiving the wrong information.

**The complete GUIDE MWD surface system includes the following:**

- Rig-floor decoder
- Surface system interface
- MWD decoder software



- MWD desktop software for PC
- Pressure transducer (10,000 psi, 4 to 20 mA, hammer union)
- Two antennas with magnetic mounts for wireless connection between rig-floor display and PC
- Pressure transducer cable
- Tool interface cable
- Weather-proof Pelican™ case
- Laptop computer (optional)





### **Teledrift ProShot MWD Tool**

Achieve positive mud-pulsing technology for precise, vertical downhole drilling.

### **FloDrift Real-Time Drift Tool**

Accurate, real-time inclination measurements during connection. The

Teledrift™ ProShot™ measurement-while-

drilling tool is a self-contained tool that uses

positive mud-pulsing technology to provide inclination and azimuth measurements for vertical downhole drilling. The tool arrives at the rigsite pre-assembled and loaded into the drill collar, ready to be integrated into the bottomhole assembly. This eliminates the necessity of on-site construction and reduces downtime. The ProShot tool is made of robust materials to promote longevity in the field and minimize washing from mud flow. This enables longer, more accurate runs.

### **Teledrift ProPulse MWD Tool**

Achieve stabilized vertical drilling with our positive-pulse measurement-while-drilling tool.

The Teledrift™ ProPulse™ measurement while drilling (MWD) tool is a self-contained, positive-pulse MWD tool used for stabilizing vertical drilling. It is easy assemble, test, and insert into the Monel on-site. The integrated tool and surface-system programming eliminate user errors, and the intuitive interface quickly displays accurate information. Additionally, the tool is fully retrievable and has a wireless connection for electronic drilling recorder setup.

The Tolteq™ iSeries pulser ruggedized gamma module (iPRGM) combines a pulser with an intelligent gamma sensor to deliver a powerful two-in-one tool that puts gamma close to the drill bit. The module is configurable to suit individual customer needs, working as a traditional pulser or in a variety of other capacities with the addition of tailored components. Extensive battery life, high-temperature reliability, and simple maintenance further drive the module's wide applicability in the field, where the data it logs are transformed into a powerful analytical device by the Tool Tracker™ software.

## Features/Benefits

- Acquires gamma 5.5 ft closer to the bit Less time to assemble
  - More logging features
  - Enhanced circuit protection features
  - Add or remove gamma as needed
  - No capacitor bank
  - Eliminate noise in downhole electrical tool system
  - Incredible reliability, even in the toughest lost-circulation material environments
  - Interfaces with legacy measurement-while-drilling system
  - Internal current consumption logged to memory
  - Quality Toltec wiring inside with strain-relief connectors and high-temperature mesh covering for wires
  - Simplified single-coil design
- Operational time and environment history recorded in internal memory\*
- Integrated three-axis digital flow switch
  - Shock and vibration monitoring and logging\*
  - Flow switch values and performance logging\*
  - More than 400 operational hours on a single battery



**Monel for MWD insert**



MWD Service



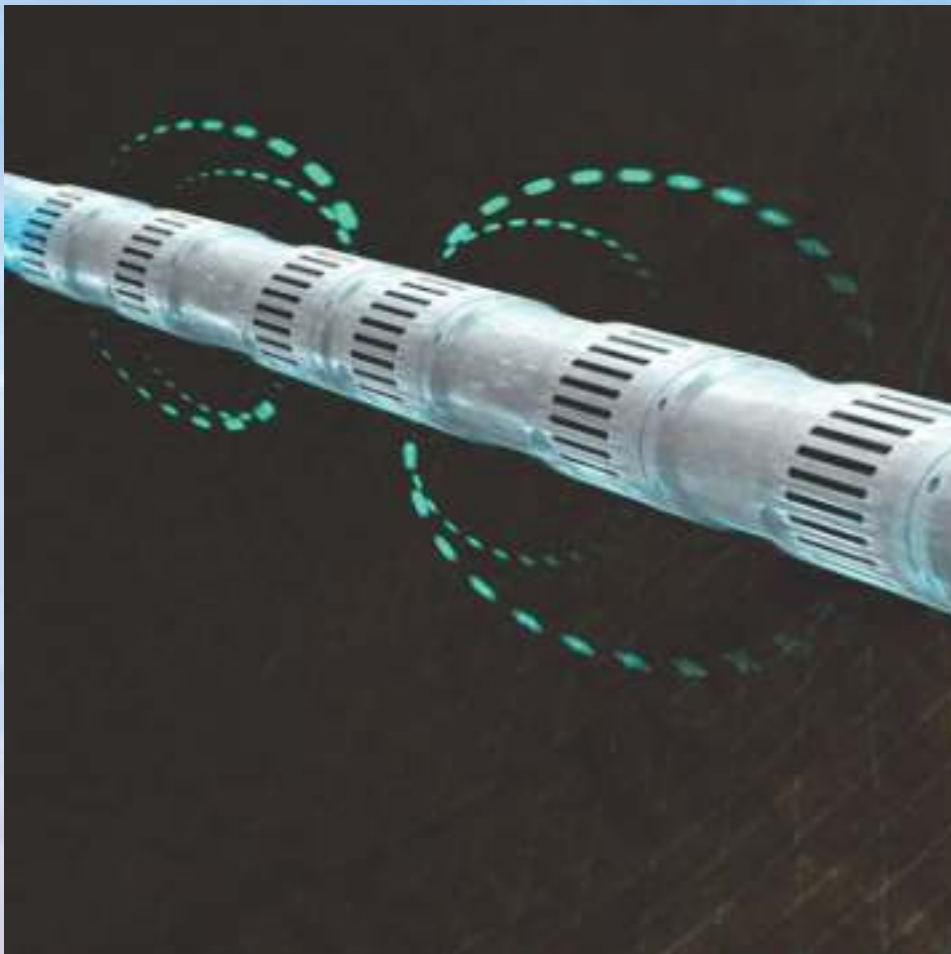
Monel for MWD insert

## Services MWD/LWD

The Tolteq™ iSeries product line, which is our probe-based, mud-pulse MWD portfolio, is a modular platform that provides directional drillers with significant flexibility to configure and deploy the tools in a wide variety of applications. Offered in both a legacy retrievable design with a bottom-mount pulser or in a fixed, top-mount pulser configuration, our Tolteq iSeries kits include everything required to run an MWD job.

### Tolteq iSeries Measurement While Drilling System

We also offer logging-while-drilling (LWD) measurements that include azimuthal gamma and resistivity. Using the Tolteq MWD platform, these tools provide the formation data in real time as well as in memory. With independent access to these critical measurements, directional drillers can now expand their capabilities and offerings into new and higher tier markets.



## Tolteq Symmetric Propagation Resistivity Tool

The Tolteq™ symmetric propagation resistivity (SPR) tool offers real-time logging-while-drilling (LWD) resistivity combined with advanced, high-bandwidth measurement-while-drilling (MWD) tools. The tool creates high-quality resistivity logs with both phase and attenuation measurements in real time—measurement capabilities as well as multiple depths of investigation and vertical resolutions help with the drilling process. With a total of eight curves recorded into memory, the SPR tool has extremely high-resolution memory data with fast data dump capability. This feature enables our field operators to create high-resolution logs after the run is complete with no impact on drilling time. The SPR tool was designed and engineered around the concept of borehole compensation with a symmetric configuration of transmitters and receivers. This reduces the artefacts on the log due to borehole rugosity while minimizing errors caused by drifts in electronic circuits—the bed boundaries are better delineated with the symmetric design.

### Features

- High-quality, real-time LWD data enhance well placement
- Multiple depths of investigation
- Symmetric design for improved data quality
- Borehole compensated data
- Low-maintenance, reliable design



Assembled tools on rack at base facility ready to be deployed to client

# GYRO SURVEY SERVICES

## Overview

The GyroTracer™ instrument is a highly accurate, extremely reliable downhole directional survey and orientation tool. Comprising of the latest technology, the SPT system uses gyro compassing method to find direction. As it is a North Seeking Gyro, all measurements are in reference to geographic north.

Unlike other downhole survey or magnetic tools, the GyroTracer™ is not affected by magnetic

interference. It can be run inside casing, tubing, magnetically 42mm diameter, be run in a variety of shallow borehole surveying, single hole casing, kick-off and orientation.



can be run inside drill pipe and disturbed ground. This easy to use system can be used for applications from shallow to deep borehole shot/multi shot, slim hole orientation, whip stock downhole motor

Operating software to

run all SPT instruments is very reliable and user friendly. The GyroTracer™ package comes with both wireline and memory mode option. Wireline mode is run from an electric line cable transmitting real time data to the computer at the surface. Mono or multiple conductor cable can be used. Memory mode is fast and cost efficient as this is powered by battery supply and run on slick line or dropped.

## Features and benefits

- Temperature rating to +200°C (+392°F)
- Outer diameter of only 42 mm (1.65") in pressure barrel
- No need for optional pressure barrel or heat shield
- Drop capability
- Easy to operate
- Single-shot, Multi-shot and Orientation capabilities
- Operates from battery in memory mode
- Measures in all directions
- Durable for harsh environments
- USB data communication
- Export all your survey data to Excel and other formats.

**Portable Calibration Stand**





The SPT Portable Calibration Stand is a simple to use, yet advanced design. This small, non magnetic stand is light weight, durable and useful for testing many downhole survey instruments.

The purpose of the SPT Portable Calibration Stand is to calibrate the SPT GyroTracer™. Its second and just as important use is for highly accurate testing of the GyroTracer™ and MagCruiser™ tools. Simply set the stand directed to geographic north.

## STAND ALONE GAS



**Gas Watch III Gas Detection system**  
Dependable and unmanned gas detection.

### Gas Monitoring Systems

Dependable and unmanned gas detection.

These Standalone gas detection system liberates formation gases trapped in the returning drilling fluid. It identifies gases that represent a danger to rig personnel and indicators hydrocarbon gas concentrations. It measures light and heavy gas concentrations as well as dissolved H<sub>2</sub>S. It is a dual IR sensor which identify the total gas measurement.

The Gas Watch EX system can serve as primary or backup gas detection system, serving both as an analytical tool and a safety system. The system can replace them with our remote logging services. Both options enable you to minimize mudlogging service costs while decreasing costs associated with housing rigsite personnel.

### Features

- **Total gas or full C1-C5 composition capability, infrared spectrometry**
- **Fastest C1-C5 gas data with real-time gas ratio calculations**
- **Geosteering**
- **Wireless unit advantage**

- **Rig safe and tough**
- **Easy rig-up**
- **Local and remote monitoring**

### **Benefits**

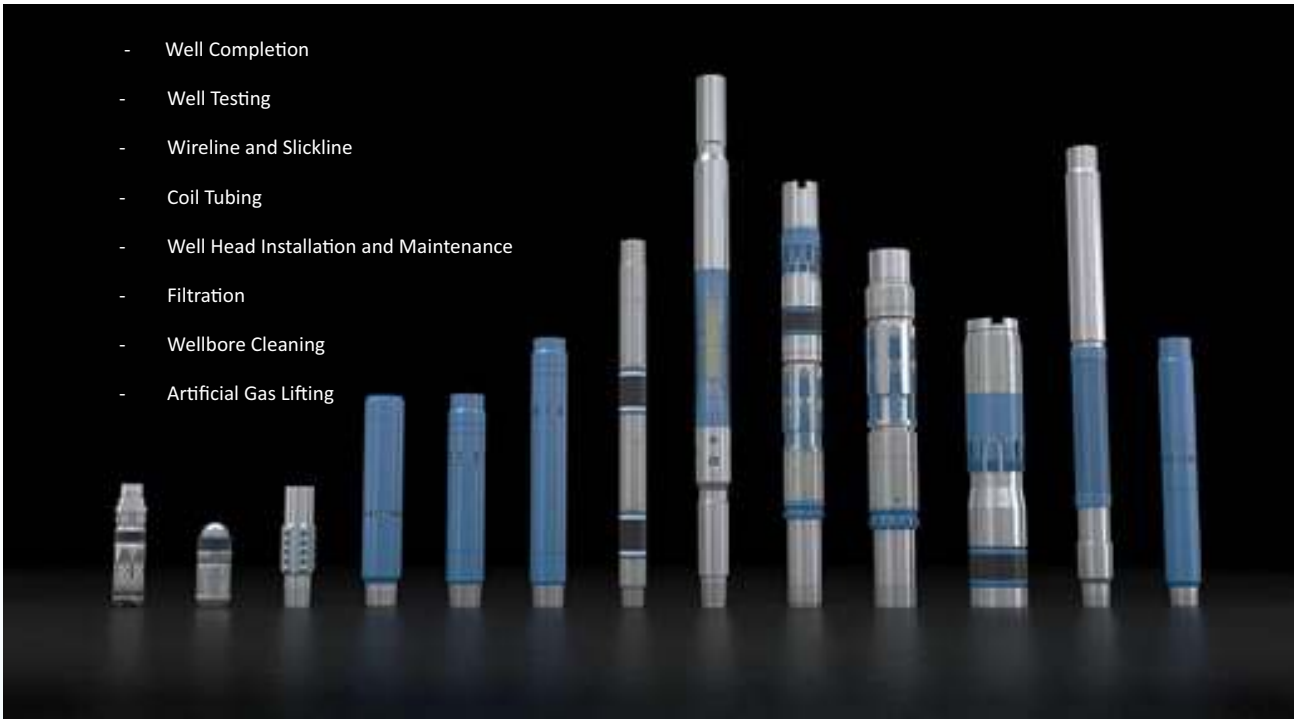
- **Allows operations as a regular total gas detector and can be selected to export C1 through C5**
- **Uses a state-of-the art infrared spectrometer calibrated for real-life gas mixtures to isolate each hydrocarbon type out of a mixture every second with the accuracy of a gas chromatograph**
- **Wetness, balance, and character ratio formulas are processed and exported every second, providing ratio values and ratio signatures in real time while drilling.**
- **Gas ratio profiles support directional driller's decision to adjust the bit's well path by geosteering to the target hydrocarbon fluid state profile, maximizing target production.**
- **Wireless data are encrypted and secure.**

### **Specifications**

- **CSA Class I, Div. 2 Gr. C&D Certification**
- **120 VAC, 60 Hz**
- **2.4-Ghz wireless communication**
- **40 to +55 °C**

# WELL SERVICES

- Well Completion
- Well Testing
- Wireline and Slickline
- Coil Tubing
- Well Head Installation and Maintenance
- Filtration
- Wellbore Cleaning
- Artificial Gas Lifting



Our Well Services provide the Completion & Production Solutions safely, efficiently with innovation to maximize the flow of hydrocarbons and direct discrete production streams everywhere our clients operate. We move into action as soon as the drill bit is pulled out of hole, we deploy our equipment in time for action. From well construction components like premium connections, liner hangers and cementing equipment to downhole screen, Completion design, our tools allow operators to optimize the completion of a well.

Once a well is completed, our robust suite of wireline equipment allows for cost-efficient and reliable intervention work from the truck to the software to the BOP stack. From there, production begins. Whether on land or offshore, our highly-engineered equipment helps lift, pump, flow and separate oil, gas, water and sand streams on the surface or even subsea. Our variety of composite piping and structures helps to connect and carry product in even the most corrosive environments.

We are here with our new technologies engineered by NOV to solved the latest oilfield problems, and to help our clients achieve lasting success.

## **Your source for completion tools from well construction to Production.**

With a focus on technology, we offer a variety of completion tools intended to enhance the access point in a well while optimizing production in the treatment operation of a reservoir. Our tools enable

improve the performance of the reservoir while achieving higher extraction ratios, reducing capital expenditure, saving time, and increasing production. We offer a portfolio of differentiated completion tools and solutions to address the most pressing needs of the global well completions marketplace.

Our tools, which broadly support horizontal Wells, include the following product line groupings:

**Multistage completions:**

- We offer a variety of multistage fracturing completion from plug-and-perf systems and ball-drop systems to coiled tubing systems.

**Well construction:**

- We provide reliable completion products including liner hanger, Liner Packer and PBRs, liner hanger packers, liner cementing and accessories, and liner running and service tools to ensure your well integrity.

**Downhole monitoring:**

- Gathering and understanding dynamic data recorded during well operations are critical to success. We offer our [i-Con](#), [i-Trace](#), and [MaxTrace](#) monitoring tools.

**ReAct systems:**

- We offer remote signaling capabilities to downhole valves and sleeves with our ReAct product line, which includes [circulation valves](#), [electronic liner shoes](#), [cleanout valves](#), [tracer valves](#), [inflow valves](#), up to [tubing filler subs](#)

**Intervention systems:**

- We offer various coiled tubing, wireline, and workover completion tools that can be customized to your well.

**Conventional completion:**

- To support your onshore and offshore projects, we offer a growing suite of conventional completion solutions from production packers to subsurface safety valves and flow control systems.

**Dissolvable products:**

- Our dissolvable balls and plugs can retain structural integrity under high temperatures and differential pressures for a specific range of time, dependent upon fluid conditions in the wellbore, before dissolving.

You can count on Houston Well to install and provide top-quality completion equipment and running tools for your well requirements.



## SURESET Liner Hanger Packer

Complete liner hanger system built on a one-piece mandrel with no internal connections



### Integrated liner hanger packer

Designed for high differential pressures, the SURESET™ liner hanger packer is a complete liner hanger system built on a one-piece mandrel with no internal connections. The SURESET includes a packing element, an integral packoff nipple profile, and the hanger.

The hanger may be set using a hydraulic cylinder or, in some sizes, a mechanical set option is available. The SURESET packing element is available in multiple elastomer options for various applications and is activated with set down weight using a packer actuator. In addition to the internal snap ratchet, the hold-down slips keep the SURESET element in position against high differential pressures.

The hanger portion of the SURESET contains slips that are fully recessed into a special profile in the rotating body to ensure trouble-free installation and uniform load distribution in the setting section. In both the set and un-set positions, the SURESET liner hanger packer allows for high bypass, ensuring low ECDs (equivalent circulating density).

#### Features and benefits

- Hydraulic set as standard; mechanical set available
- Eliminates potential le

- Fully pocketed slips for running in challenging conditions
- Non-rotating and rotating during cementing options available
- 10,000 psi tested rating in all sizes
- Integrated packoff nipple
- Large annular flow area in set and unset positions
- Internal body lock ring positively locks in applied setting force to packing element
- Capable of hanging long, heavy liners with enhanced hanging capacity and multi-cone options

### **Thread Connections**

- Standard VAM 21/VAM TOP
- Other premium connections available upon request
- BTC, LTC

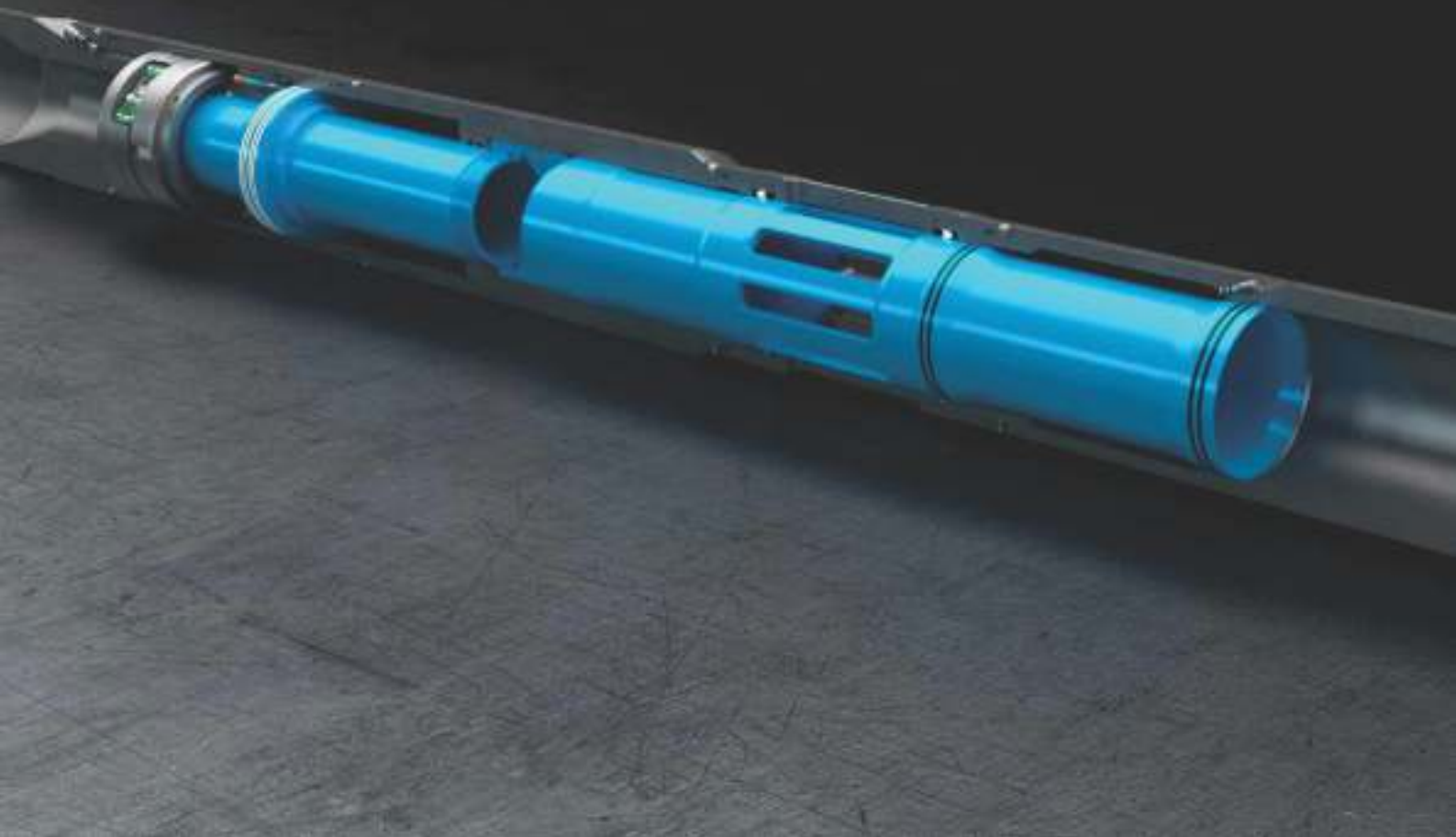
### **Materials**

- L80, L80 13Cr, T95, C110, P110, Q125, SM2535/VM28





**The ReAct™ electronic liner shoe (ELS)**



### **The ReAct™ electronic liner shoe (ELS)**

The ELS is a well pressure control device designed to be installed below ReAct completion valves in the horizontal section of a well. It is deployed as part of the liner in the open position to auto-fill the liner and allow for pumping operations to be performed.

The ELS may be programmed to close upon the expiry of a predetermined ReAct time delay, or by using ReAct pressure recognition technology. In addition, a combination of both the above methods may also be utilized.

Two robust independent sets of ReAct electronic circuits and two independent operating mechanisms provide 100% redundancy. Once closed, the valve is mechanically locked in the closed position, creating a pressure barrier between the liner and the reservoir. This allows for multiple pressure tests to be carried out to test the completion, set the packer, and initiate the ReAct completion valves.

### **Features**

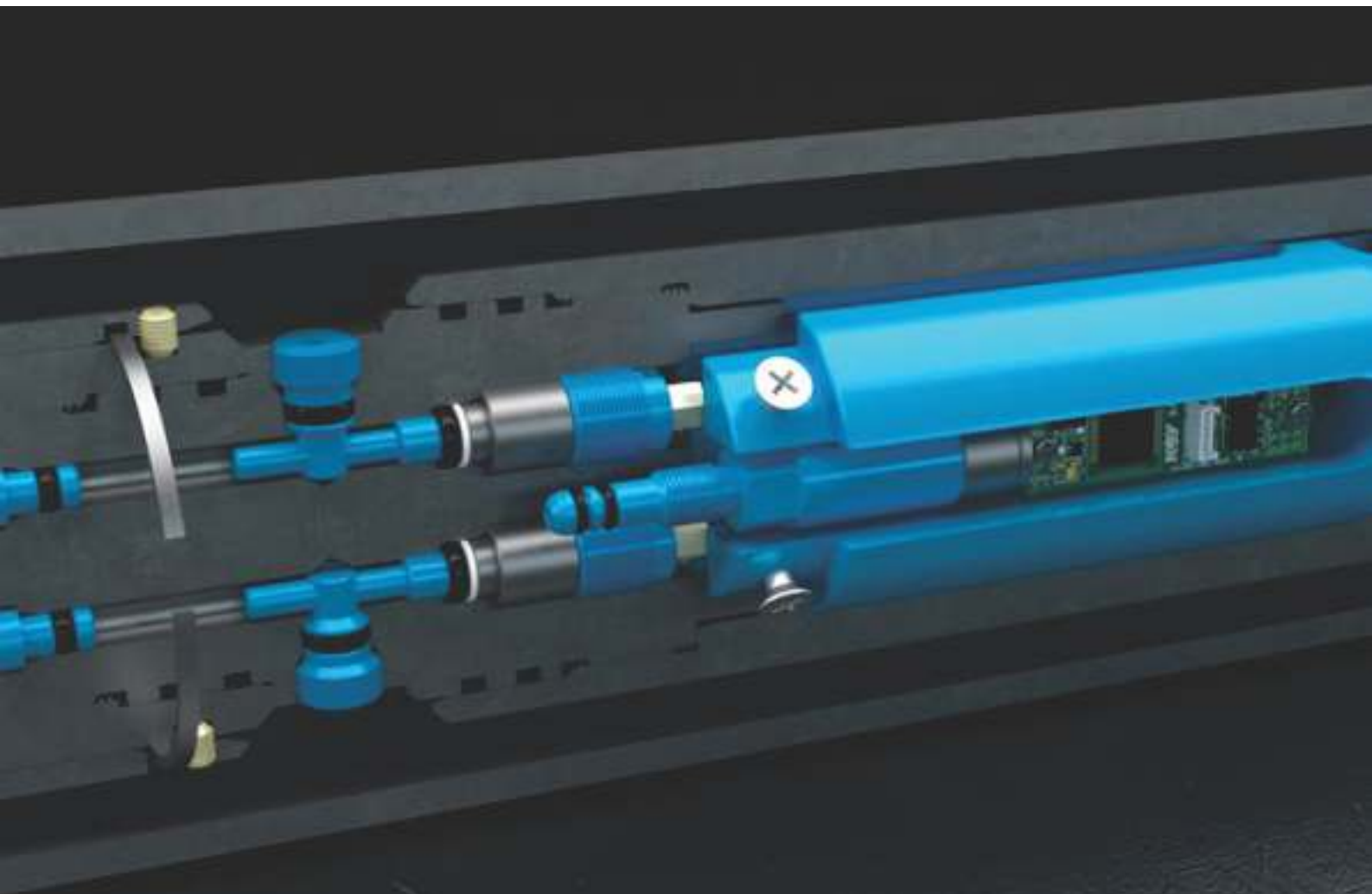
- ###ISO 14998 V3 validated
- ###HAL tested and field-proven electronics

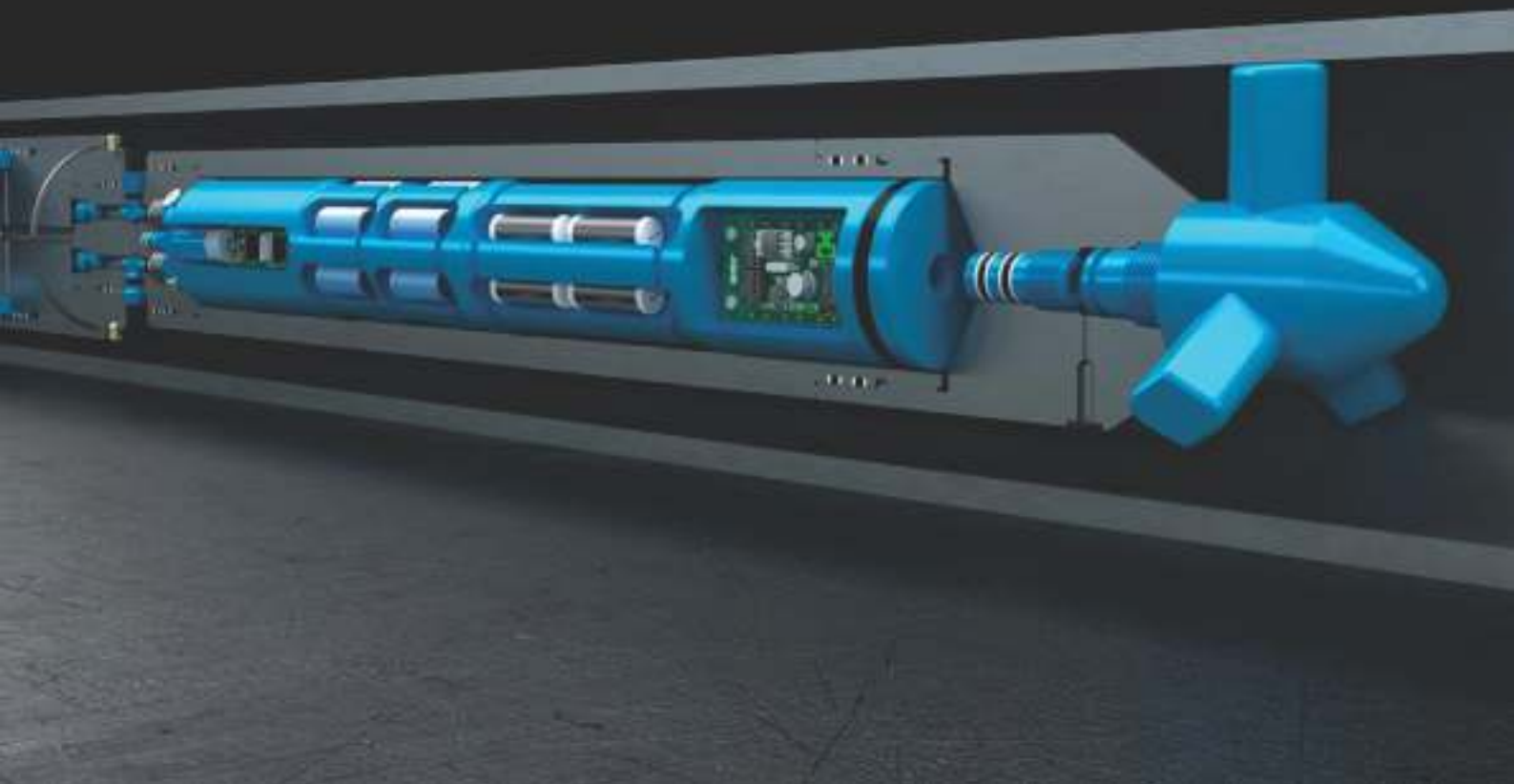
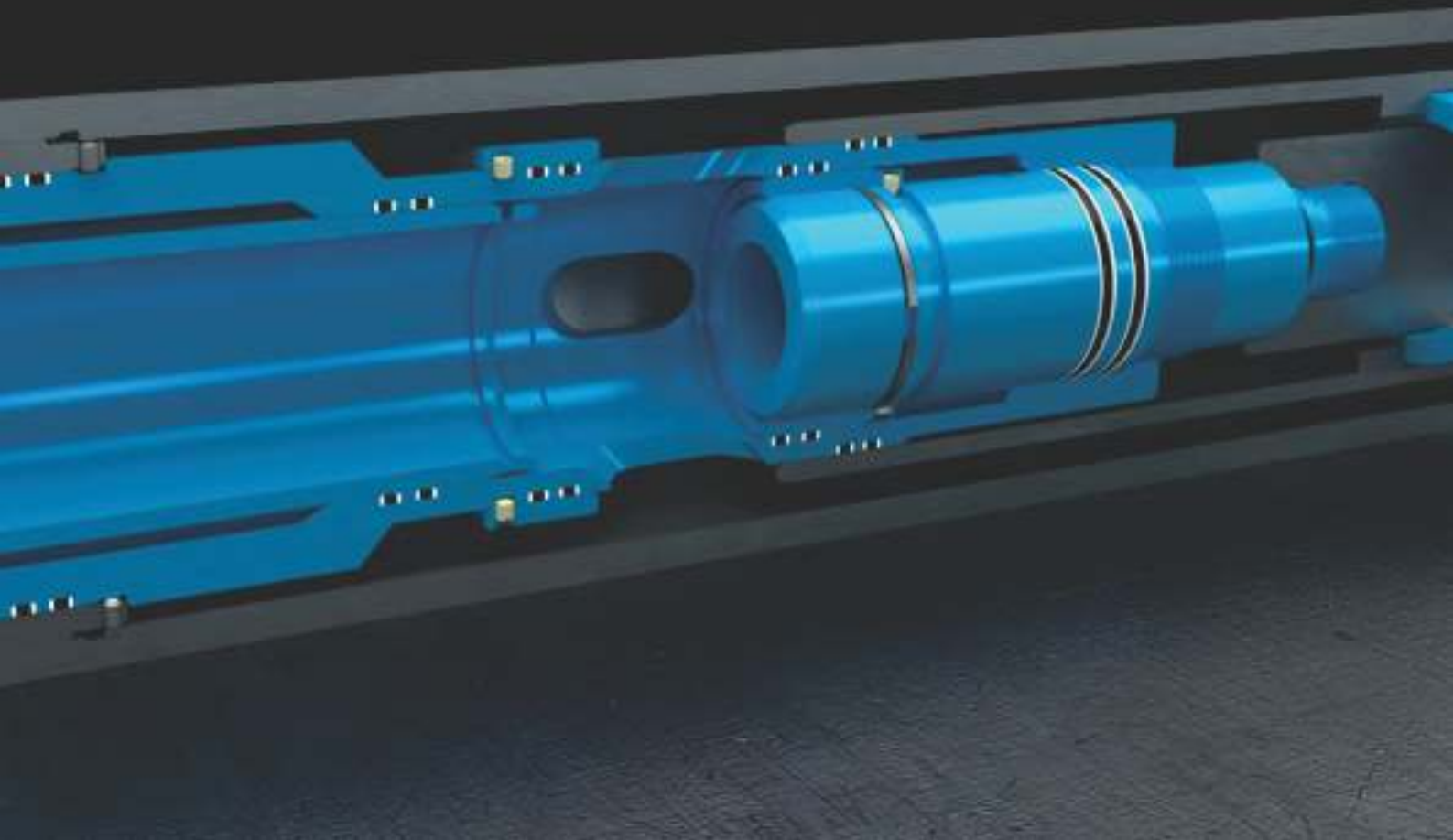


- ~~###~~Delayed closing for up to 120 days
- ~~###~~Field-proven and reliable technology
- ~~###~~Two independent electronic circuits
- ~~###~~Two Independent operating mechanisms
- ~~###~~Protected sealing surfaces prior to activation
- ~~###~~Large flow area

## Benefits

- ~~###~~Auto-fills the liner during deployment
- ~~###~~Allows pumping through the liner
- ~~###~~Eliminates the need for an inner work string
- ~~###~~No intervention or manipulation required
- ~~###~~Closes to provide pressure integrity after a predetermined time delay or pressure signal, or a combination of both







### **ReAct Clean Out Valve**

The ReAct Clean Out Valve unloads mud and cleans up the wellbore as an integral part of the completion string.

## ReAct Inflow Valve

Our ReAct Inflow Valve facilitates the control of well flow through ports or installed chokes. The ReAct™ Inflow Valve (RIV) is a permanently installed and electronically actuated sleeve-type valve that facilitates the control of well flow through ports or installed chokes. The on-board electronics require no connection to surface, as the valve uses our ReAct remote signaling technology. Multiple valves can be installed in a wellbore with isolation packers above and below to provide zonal control and isolation. Their flexible functionality and modular design enable a range of applications such as remote water shutoff, selective startup, sand-screen optimization, and zonal fracturing.

A typical valve features two independent ReAct electronics modules—either of which can provide the actuation for the device. The electronics are easily programmed at the wellsite from a laptop computer running standard Windows software.

### Features

- Field-proven electronics
- Delayed function for up to 180 days
- Top selective profile for pressure control accessories
- Defaults to mechanical sleeve
- Multiple valves in one well
- Uses existing wireline intervention procedures when mechanically actuated
- Large flow areas
- Inexpensive option to smart well equipment
- Sleep mode to extend valve life

### Benefits

- Increased production due to better contribution from minor zones
- Increased production from improved recovery
- Increased production from subsequent water shutoff
- No requirement for hydraulic lines or cables from surface to function the valve
- Wirelessly open or close via demand signal from surface, eliminating the need for wireline conveyance





## Applications

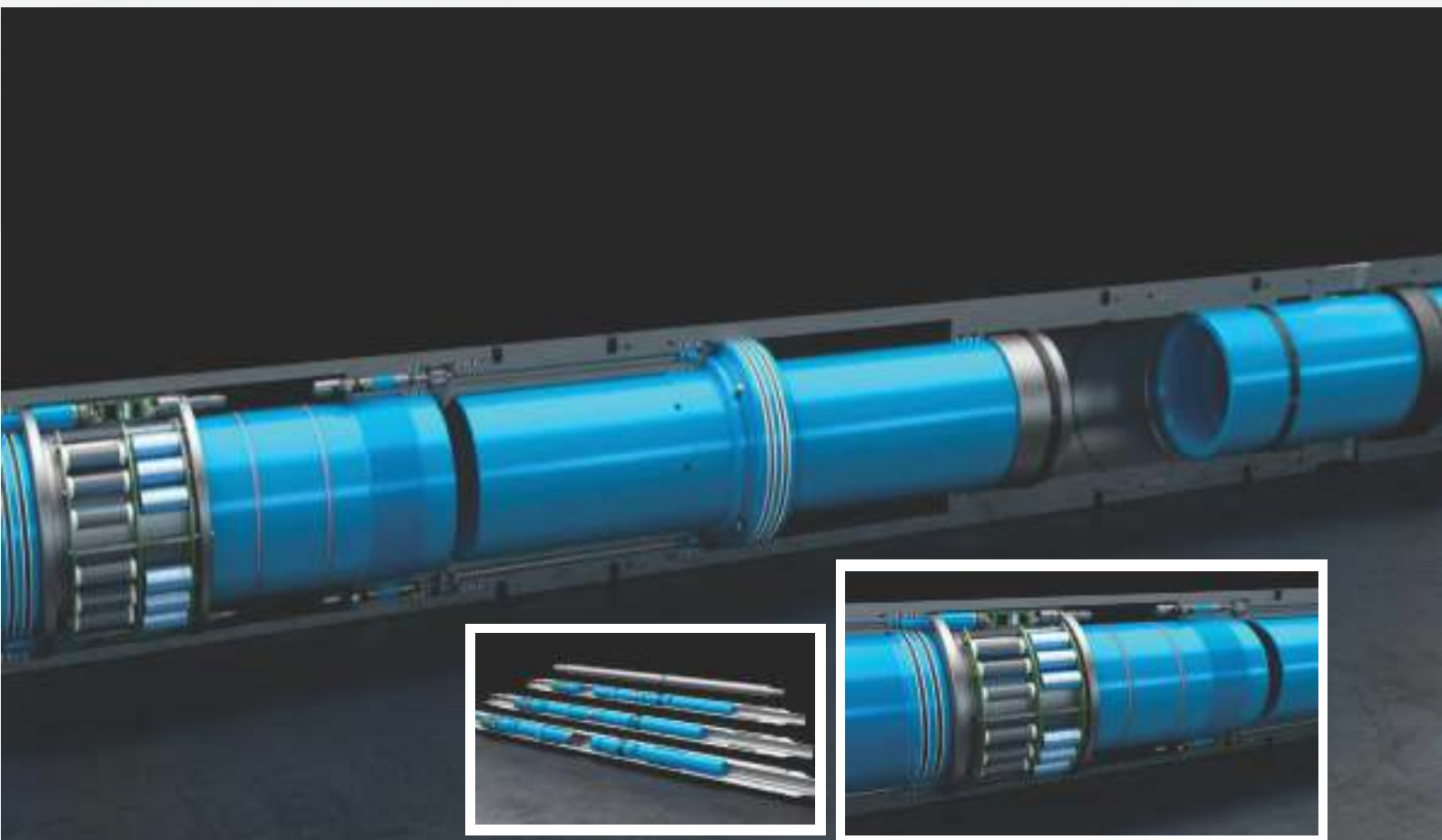
- \* Delay production from a particular zone
- \* Isolate laterals to allow staged startup
- \* Flow control in laterals
- \* Water shutoff after start-up
- \* Test individual zones following start-up or during startup Fracturing operations

## ReAct Completion Circulation Valve

Our ReAct completion circulation valve incorporates our unique ReAct technology to enable downhole tools to be remotely activated without control lines or intervention runs.

The ReAct™ Completion Circulation Valve (RCCV) is a remotely activated completion valve that is run above the upper completion production packer. The valve incorporates our unique ReAct technology, which allows downhole tools to be remotely activated without the need of control lines or intervention runs. The valve offers significant cost and time savings compared to conventional operations. Dependent on the well design, either multiple wireline runs can be eliminated or, in many cases, entire middle completion strings can be eliminated, saving both significant rig time and cost.

The RCCV can be deployed above any packer and is run closed to allow for packer setting and packer/tubing testing. Once the production packer is set, the operator can pressure test the tubing against the closed RCCV. Applying increased annulus pressure then bursts a ruptured disk to open communication ports to circulate between the tubing and the annulus and vice versa. Once the tool is open, tubing fluid is then circulated out to a lighter fluid to allow the well to flow naturally. The valve is then closed by applying a ReAct pressure signal.





#### Benefits

- No need for control lines
- No need for intervention runs to operate valve
- Potentially removes the requirement for a middle completion string
- Maximum flow area through circulating ports
- Pressure signal can be fully adjusted until deployment

#### Application

- Displacement of completion fluids

### ***Field/Workshop Service***

Houston Wells Completions has qualified and experienced field/workshop engineers with years of industry experience deploying various completions services across the world. Our engineers have vast experience with capability to assist the client with on the field troubleshooting capabilities. Houston Wells Completions has the capability to make up different sizes of completions accessories using certified bucking and pressure testing unit. After make-up of these accessories, they can be pressure tested in the shop before being sent to the field as required by the client.

### ***Cementing (Field/Laboratory Services)***

Houston Wells Cementing services has qualified and experienced field/laboratory engineers with years of industry experience carrying out cementing services both in the laboratory and on the field across the world. Our engineers have vast experience with capability to assist the client with cement design and on the field troubleshooting capabilities.





## Gas Lifting Services

Houston wells Completions has the capability to provide different types of completions services for various design and deployment as required by the client while ensuring the client's objectives are met at reduced costs and risks for the client.

- Gas lift Systems (GLM)
- Field/Workshop Service
  - Equipment owned and used for the calibration of Injection Pressure Operated Valves
- Gas Lift Valve Calibrator.
- Temperature controlled water bath.
- Aging Chamber.

The Gas Lift Calibrator is an equipment designed to calibrate Injection Pressure Operated Valve (IPO) usually installed in the side pocket of the Gas lift mandrel for production optimization. These valves are calibrated to a particular pressure known as the TRO (Test Rack Opening) Pressure according to the design given by the client. This calibration is done under controlled temperature after which the valves is aged to ensure stabilization of the bellows. This puts the valve in good working condition when downhole

# WELL TESTING SERVICES

The Houston Well Testing services has the capabilities to carry out this service in country with readiness to deploy 24 hours:

- Activation and Clean-up services.
- Extended Well Test services.G



## Wireline/Slickline Service

We have the tools you need for your successful well intervention operations. Our range of downhole tools include rope sockets, stems, jars, running and pulling tools, combination tools, and the mechanical tubing punch perforators. We also provide innovative tools to improve our efficiency which include our universal pulling tool, roller conveyance system, and the Centroller.

Never compromise on your flow control products for high pressure and high temperature. Our wide range of flow control items are available for tubing sizes from 2 $\frac{3}{8}$  to 7 in. and can be custom designed to suit your specific projects. These products are suitable for most well types including high-value, high-pressure subsea completions. Our wide range of flow control products include locks, plugs, landing nipples, isolation sleeves, valves, and all necessary pulling and running tools.

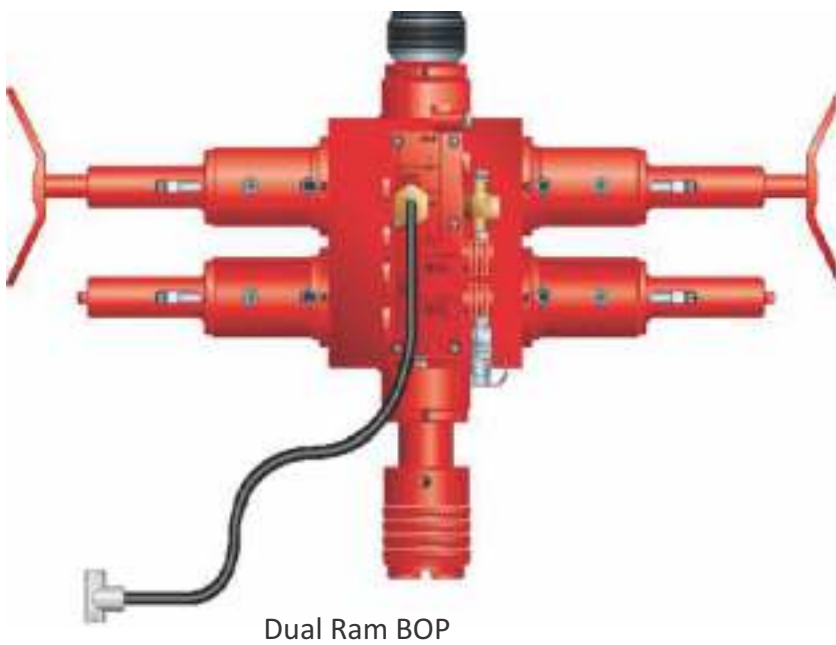
### Slickline Tools

- Standard Toolstring
- Running, Pulling, Shifting and Positioning Tools
- Fishing Tools
- Special Application
- Flow Control Equipment
- NOV Series Locks and Plugs
- OTIS Style Locks and Equalising Assemblies
- Completion Accessories





SlickLine Containerised Zone 2 Double Drum



Slickline Pressure  
Control Rig-Up

Stuffing Box

Tool Catcher

Lubricator

Lubricator

Lubricator c/w

Bleed Down Sub

QuickTest Sub

Single BOP (now more  
commonly Dual BOP)

Flanged Crossover





## Wireline tools

Self-contained and tough enough for the most remote oilfields, our ASEP™ LandLine D truck-mounted wireline winch system equips you to provide wireline intervention services in every terrain. The wireline truck is available in a fully self-contained package with an integral power pack and generator, the LandLine D can run services from 0.092-in. slickline and casedhole services, all the way to 17/32-in. openhole logging. The large cabin accommodates data acquisition equipment and an engineer's desk or a slickline workbench area for tool redress far from home base. Power packs in heavy duty or super duty format is readily available, for the power to get the job done fast even in the deepest of wells. With RigSafe or Zone II options, the LandLine D can be tailored to fit our client's need and maximize efficiency.



## Features/Benefits

- #SO 20 ft container format provides maximum transportation flexibility
- #Powerful diesel engine provides enough power for heavy-duty jarring and deep wireline logging operations
- #Single- or dual-drums available for well servicing from logging to slickline or heavy-duty fishing
- #Reliable ASEP closed-loop hydraulic system provides both excellent low speed control and jarring response
- #Electrical generator up to 30 kW to supply on-site power requirements in required of voltage and frequency
- #ASEP 10-in [LineMinder™](#) provides powerful safety features and job recording information
- #Air conditioning, Dehumidifier, Intercom
- #Slow-speed valve, BOP control, Stuffing box control (slickline), Logging rack
- #Engineer's desk and chair, Tool and stem rack (slickline), Two-speed gearbox (open hole)
- #Certified Zone 2 ATEX



# OUR SYSTEM

The key aspect of successful delivery of project is the existence of systems and processes to guide project team. HWSL has put in place a dynamic system

## **SAFETY MANAGEMENT SYSTEM**

The Well Manned Safety Management System defines the principles by which we conduct our operations with regard to the quality of our services and products; the health and safety of our customers, employees, contractors and communities where we work; and protection of the environment. The primary objective of safety is to identify and mitigate risk to as low as reasonable practical to prevent injuries, losses and damage to the environment. All employees are responsible for contributing to a healthy working environment, by performing their work in a safe manner and do what is necessary to prevent injuries and damage to assets and the environment. Each employee is empowered to stop any unsafe act in any place or at any time.

## **PROJECT MANAGEMENT**

Our Project Management System defines the recommended minimum requirements and methodology for both setting up a new project and running an existing project. It includes requirement and methodology for initiation, planning, execution and close out of projects.

## **WELL ENGINEERING MANAGEMENT SYSTEM**

The Houston Well Services Limited, Engineering Management System, which is an integral part of our Project Management System, describes specific requirements to ensure the technical integrity of drilling projects in terms of process to follow for adequate planning, design and execution of the well operations. It is implemented via specific project plans by means of a number of elements designed to reinforce service quality. Furthermore, the system is designed to ensure that lessons learnt during project execution are carried forward to create of continuous improvement.

## **QUALITY MANAGEMENT SYSTEM**

Houston Wells Quality Management policy is shown below. We are committed to, and believe that, proactively managing product and service Quality delivery is cardinal to customer satisfaction and the long-term success of our business.

Houston Well Services Limited Quality Management Systems are an integral part of our HSE, Project Management System and Well Engineering Management Systems.

## **NCDMB Policy**

In accordance with the directive of NCD, we dedicate more than 1% value of every project for the training and retraining of members of our team. Our team can also boast of highly experienced engineers and administrative staffs with the required industry accredited certifications.

We operate a system where our teams are motivated to achieve success through incentives and award systems.





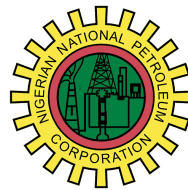
# OUR CLIENTS

---

ExxonMobil

seplat

WS WALTERSMITH





📍 Plot 162 Chief Wonwu Avenue, Trans Amadi Industrial Layout,  
Port Harcourt, Rivers State

✉ [info@houstonwellservices.com](mailto:info@houstonwellservices.com)

☎ +234 805 776 8010

🌐 [www.houstonwellservices.com](http://www.houstonwellservices.com)

---

*...excellence in safety and quality service delivery*