

DRILLING & COMPLETION ESSENTIALS FOR NEW ENGINEERS & NON-TECHNICAL PROFESSIONALS

Thursday 24th - Friday 25th November, 2016

Course Overview

This course is designed to provide participants with basic understanding of activities that relate to the drilling and completion of oil and gas wells. The course covers the entire process from the well planning phase to rig site operations. Insight is also provided into drilling problems and reasons for well intervention after the well is put on production. This course will equip you, whether in a managerial or supporting role, to contribute significantly towards ensuring that well project delivery targets are met, within the approved Authorization For Expenditure (AFE) and with minimal Non Productive Time (NPT).



New engineers and executives in the following fields who are interested in enhancing their knowledge and awareness of the drilling & completion process for increased contribution to the well delivery:

- Accounting & Commercial
- Business Development
- Human Resources
- Legal
- Finance & Administration
- Estimation & Proposal

What you will gain:

- An overview of Well Planning & Design
- Drilling Cost Oonsiderations
- Types of Onshore & Offshore Rigs and the Drilling Rig Systems
- The role of key Drilling Personnel and Service Providers
- The Drilling and Completion Sequence
- Common Challenges in Drilling Operations

Learning Outcomes

- Describe the well planning process and appreciate each element in the planning process.
- Understand major cost components of drilling operations and its
 impact for better project planning and management
- Describe the basic sequence for onshore & offshore drilling and completion
- Identify drilling rigs and major equipment; understand their functions to promote a deeper understanding of technical and logistical considerations

- Planning & Budgeting
- IT Support
- Procurement & Supply Chain
- Tenders & Contracts
- Joint Ventures
- Logistics & HSE

Training Venue



3, Adekola Balogun Street, Maruwa Round About B/Stop Lekki, Lagos

Contact Information



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Course Outline

This course will be delivered through multi-media presentations, case studies, exercises and discussions. A detailed reference manual would be provided for continuous learning and sharing. The class size would ensure effective interaction.

Day 1

OVERVIEW OF OIL AND GAS EXPLORATION

- Brief History of Drilling Practices
- Reservoir rocks
- Petroleum Formation & Accumulation
- Hydrocarbon Prospecting
- The Exploration and Production Lifecycle
- Oil & Gas Licensing Permits
- The role of E&P Professionals

WELL PLANNING AND DESIGN

- Different Well Operations Drilling, Completions & Well Interventions
- The Well Proposal
- Formation Pressures Basic Calculations
- Overview of the Well Design Process
 - Well Trajectory Design Vertical; deviated; horizontal; Multilaterals
 - Directional Drilling Considerations
 - Bottom Hole Assembly & Drilling Bit Selection
 - Torque, Drag & Hydraulics Modeling
 - Drilling Fluid Specifications
 - Formation Evaluation Considerations
 - Casing & Cementing Specifications
 - Completion Considerations
 - Long Lead Equipment
- The Well Programme
- Location Preparation
- Drilling Rig Selection

TYPES OF RIGS

- Drilling on land basic land rigs
- Offshore Rigs
 - Floating rigs and fixed platforms
 - Semisubmersibles, Drill ships, Tender assisted rigs
 - Jack-ups and steel platforms.
 - Tension leg platforms, Spars

WELL PLANNING AND DESIGN

- The derrick, the hoisting system: Crown block, traveling block, drilling line
- The power system
- The rotating system: Kelly Drive, Top drive
- The circulating system: Mud pump, shale shaker, desander, desilter
- Well control system, BOP



THE DRILLING SEQUENCE

- Drilling Personnel Organization at the rigsite (Onshore/Offshore)
- The Role of Client Representatives and Service Contractors
- Drill Well on Paper (DWOP)
- Rig Mobilization; Rig Move and Rig-up
- The XKC Project
- Pre-spud Operations e.g. Stove pipe pilling
- Top Hole Section Operations
- What happens on the drill floor? (Mouse hole connection, racking stands of drill pipe)
- Mud Logging
- Casing & Cementing Operations
- BOP Operations
- Intermediate Section Operations
- Gyro/MWD/LWD/DD
- Production Section Operations
- Formation Evaluation
- Well head Operations
- Plan vs. Actual Drilling Problems / NPT; Reporting
- Offshore Peculiarities

WELL COMPLETIONS

- Types of Completions
- Wellbore Cleanout
- Brine Filtration
- Perforating
- Running Completions
- Christmas Tree Installation
- Well Handover / Production Testing

WELL INTERVENTION

- Fishing
- Overview of Rigless Operations

Course Instructor

Gbenga Emmanuel Adeyemi is a seasoned Petroleum Engineer with experience spanning more than 35 years in the oil and gas industry notably spending 27 of those years with Shell Nigeria & International, having retired in 2004 as a manager, Production Planning and Operations. He has extensive knowledge and expertise in drilling operations rising to a Senior Drilling Engineer/Supervisor while handling a lot of drilling projects and applying various initiatives in significant cost reductions. He has attended numerous technical and commercial courses locally and internationally and also spent a lot of time at the Shell Training School developing and mentoring students and staff alike. He now provides drilling consultancy and advisory services for a number of independent & marginal field operators.



Registration

Price: N75,000

Registration is complete upon payment

Included in the price:

Tuition, course materials, lunches and refreshments

Discounts: (One Discount Per Booking Only):
N25,000 discount (N50,000 price) if delegates book before 07 November, 2016
Group discount for delegates from the same company: 5 for the price of 4.

4 easy ways to register:

1. Tel: 07035336177 | 08135990508

Email: info@havilahenergy.com
 Mail: Havilah Hydrocarbon Resources
 Mgt. (Nig). Ltd. 3, Adekola Balogu Street,
 Maruwa Roundabout B/Stop, Lekki,
 Lagos.

2 easy ways to pay:

1. Bank transfer 2. Cheque

Payment can be made to the details below; ACCOUNT NAME: HAVILAH HYROCARBON RESOURCES MANAGEMENT NIGERIA LIMITED BANK NAME: DIAMOND BANK PLC, ACCOUNT NUMBER: 0063618735

<u>Terms</u>

Payment is at registration and places on the programme are only guaranteed with payment. If you have to cancel your place the following policy will apply: cancellation within 1-14 days of the programme start 100% charge; 15-30 days 50% charge; 31+ days 10% charge. Your colleague can take your place subject to a 10% administration charge. Havilah Hydrocarbon Resources Mgt. (Nig.) Ltd is not liable for any costs incurred by delegates in the unfortunate event that the course is cancelled. Delegates are responsible for arranging their own travel and accommodation and associated costs. Havilah Hydrocarbon Resources Mgt. (Nig.) Ltd reserves the right to change or cancel any part of the published programme due to unforeseen circumstances.

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