The Drilling and service personnel struggle daily with the oil and gas industry’s inexperienced labour force. This inexperience at the wellsite results in excessive non-productive time, trouble time, and invisible lost time. These, in turn, lead to unsafe incidents and excessive costs to the operator, the contractor, and the service industry. This course teaches participants to apply organizational learning processes, wellsites technical limits analysis, and more efficient use of all resources at the wellsite. Participants will learn how to identify and mitigate hidden risks that often are overlooked during the planning, design, and execution phases of a drilling operation; and how to dissect and analyze an operational plan. In addition, applying operational innovations and advanced motion and time processes will lead to improved efficiency of wellsite rotary operations and individual wellsite tasks. Participants will be introduced to models, templates, techniques, and real case studies that can be used on the job. This course brings together a documented planning and design process, maximizes drilling efficiency, and transfers the execution plan to the wellsite for implementation.

**What you will gain:**
- Critical elements of effective planning and management of drilling operations
- Design and implement a program “checklist” for critical well drilling operations
- Investigate various elements of a drilling operation and mitigate visible and hidden risk
- Investigate and perform an analysis of trouble time events, non-productive time occurrences and invisible lost time for a drilling operation
- Dissect the drilling plan and apply total task analysis to wellsite activities
- Enhance your knowledge of organizational learning systems and transfer lessons learned
- Perform technical limit analysis to improve wellsite performance
- Measure and performance monitoring of the drilling operation
- Maximize the inexperienced resources through total task analysis in a case study to reduce drilling costs and improve safety

**Learning Outcomes**
- How to reduce the time/cost of wellsite operations without compromising safety.
- Define a well's technical limit and implement a plan that will work to reach it
- Identify and mitigate hidden risks to reduce lost time
- Apply practical organizational learning techniques to benefit from lessons learned
- Build effective rig site teams.

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**WHO SHOULD ATTEND**
- Operations managers
- Drilling managers
- Drilling superintendents
- Drilling supervisors
- Wellsite drilling engineers
- Rig managers
- Rig superintendents
- Contract drilling engineers
- Service company supervisors
- Supply company managers
- Logistics personnel
- Operations personnel
- Information technology personnel.

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

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**Contact Information**
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08034636098 | 08186091418
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

- Site preparation.
- Water wells, water storage and water supply.
- Site leveling and banding.
- Cellar construction.
- Safety considerations.
- Camp site readiness.
- Reporting.
- Rig move in.
- Rig Mobilization to site.
- Reporting.
- Rig up operations.
  - Rig up progress and monitoring.
  - Ordering drilling tangibles and intangibles.
  - Safety considerations.
  - Reporting.
- Rig commissioning prior to spud in.
  - Rig Inspection.
  - Rig standard test.
  - Rig tubulars and fishing tools.
  - Compliance of rig with Operators regulation.
  - Safety considerations.
  - Regulatory and operator approvals.
  - Water well testing and storage.
  - Reporting.
- Inventory of Drilling equipment, materials and procedures, prior to spud.
  - Essential material availability prior to spud-in.
  - Rig operational procedures.
  - Testing operability of rig equipment.
  - Emergency response review.
  - Emergency procedures review.
  - Safety procedures Review.
  - Rat hole and mouse hole preparation.
  - Material orders.
  - Reporting.
- Spudding the well in.
  - Procedures for spud-in.
  - Top hole drilling problems.
  - Mixing of spud mud.
  - Spud-in BHA.
  - Reporting.
- Conductor hole drilling operations.
  - Drilling the conductor hole.
  - Preparing the conductor casing.
  - Conditioning hole for conductor casing.
  - Cementing the conductor casing.
  - Installing wellhead equipment & testing (Diverter).
  - Well control equipment and testing.
  - Clean out conductor casing.
  - Preparation to drill surface hole.
  - Materials availability for the next section.
  - Mixing drilling fluid for next section.
  - Reporting.
- Surface hole drilling operations.
  - Procedures for drilling surface hole.
  - Material availability for surface hole.
  - Bottom hole assemblies for the surface hole.
  - Anticipated drilling problems in the surface hole.
  - Drilling surface hole.
  - Preparing surface casing.
  - Running Surface casing.
  - Cementing Surface casing.
  - Wellhead installation and testing.
  - Well control equipment and testing.
  - Surface casing clean out.
  - Surface casing pressure testing.
  - Materials availability for the next section.
  - Mixing drilling fluid for next section.

Day 2

- First intermediate hole drilling operations.
- Procedures for drilling first intermediate hole.
- Material availability for first intermediate hole.
- Bottom hole assemblies for the first intermediate hole.
- Anticipated drilling problems in the first intermediate hole.
- Testing surface casing.
- Drilling first intermediate hole.
- Preparing first intermediate hole.
- Running first intermediate hole.
- Cementing first intermediate hole.
- Wellhead installation and testing.
- Well control equipment and testing.
- First intermediate casing clean out.
- First intermediate casing pressure testing.
- Materials availability for the next section.
- Mixing drilling fluid for next section.
- Reporting.
- Second intermediate hole drilling operation.
  - Procedures for drilling Second intermediate hole.
  - Material availability for Second intermediate hole.
  - Bottom hole assemblies for the Second intermediate hole.
  - Anticipated drilling problems in Second intermediate hole.
  - Drilling Second intermediate hole.
  - Preparing Second intermediate casing.
  - Running Second intermediate casing.
  - Cementing Second intermediate casing.
  - Wellhead installation and testing.
  - Second intermediate casing clean out.
  - Second intermediate casing pressure testing.
  - Materials availability for the next section.
  - Mixing drilling fluid for next section.
  - Reporting.
- Production hole drilling operations.
  - Procedures for drilling the production hole.
  - Material availability for drilling the production hole.
  - Bottom hole assemblies for the production hole.
  - Anticipated problems in production hole.
  - Drilling production hole.
  - Coring production hole.
  - Logging production hole.
  - Preparing production casing/liner.
  - Reaming Production hole.
  - Run production casing/Liner.
  - Cementing Production casing /Liner.
  - Clean out production casing/Liner.
  - Pressure testing production casing/liner.
  - Preparing completion fluid.
  - Displacement of drilling fluid.
  - Lay down tubulars.
  - Run in hole tubing string.
  - Displace hole to completion fluids.
  - Installing X-mas tree and testing.
  - Reporting.
- Rig release.
  - Return of operator’s materials.
  - Rig release procedures.
  - Safety consideration.
  - Lay down rig equipment.
  - Reporting.
- Rig move out.
  - Rig equipment move out of location.
  - Safety considerations.
  - Reporting.
Course Instructor

Isaac Nwaukwa 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: N100,000

Registration is complete upon payment

Included in the price:
Tuition, course materials, lunches and refreshments

Early Bird Discounts:
• 20% discount for registration on or before 14th July, 2017
• 15% discount for registration before 11th August, 2017
• 10% discount for registration before 1st September, 2017

Group discount for minimum of 5 participants if registered before 1st September, 2017 attracts 20%

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

4 easy ways to register:
1. Tel: 08034636098 | 08186091418
2. Email: info@havilahenergy.com

2 easy ways to pay:
1. Bank transfer  2. Cheque

Terms:
Payment is on registration and enrolment for the programme is only guaranteed for payment.

Cancellation Policy:
Cancellation made minimum of 30days prior to scheduled date attracts 90% refund. Between 15 and 29 to scheduled date attracts 75%, between 5 to 14 days attracts 50%. Cancellation made less than 5days to programme attracts no refund but such amount is transferable as a set-off against future training cost. 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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