

## FAST TRACK ASSISTANT DRILLER COURSE TRAINEE

| Course Duration | Location | Theoretical | Practical |
|-----------------|----------|-------------|-----------|
| 15Days          | NIGERIA  | 30%         | 70%       |

### Who Should Attend

OND, HND, Bsc/Eng in Engineering and Sciences from a reputable schools in Nigeria and Overseas. O'Level Students with 3 years minimum experience in the oil and gas Industry will be considered for admission.

### Job Description for an Assistant Driller

Large oil companies install oil rigs in order to extract natural gas and oil from deepwater deposits. Assistant drillers have the work responsibility of directing a work crew of "roughnecks" on offshore oil rigs. Roughnecks perform most of the manual labour in maintaining drilling equipment and extracting hydrocarbons. According to Oil Rig Job International, assistant drillers earn an average salary of **\$52,000 to \$63000** Per Annum.

### Supervision

The driller directly controls the rate of drilling and a skilled position that requires extensive knowledge of rock types and drilling procedures. Assistant drillers run the work crew and take information from the driller and give it to their crew. The crew consists of roughnecks, who do rough labour, and the Derrickman, who works 90 feet above the rig to handle the drill pipe. While the assistant driller acts in a predominately supervisory role, they may also work alongside the roughnecks to run machinery.

### Maintenance

According to Transocean, assistant drillers perform equipment safety checks on all drilling systems, and monitor all drilling equipment to ensure proper function. Assistant drillers assure constant well pressure and adjust machinery. For more serious maintenance issues with the drill, these professionals will report to their supervisor, who will have the problem fixed by repair crews and engineers.

## **Monitoring**

Assistant drillers train roughnecks to recognize abnormal well conditions in order to prevent leaks and rig blowouts. Abnormal well conditions can include excess pressure, a reduction of the weight of the drill pipe, sedimentary deposits mixed with the oil, or changes in drilling weight. According to Transocean, assistant drillers make regular reports to a senior drilling supervisor in order to detail well conditions.

## **Safety**

Because of the dangerous nature of oil rigs, which includes explosions, noxious fumes and high-powered machinery, assistant drillers must educate their team on all safety procedures put into place by the drilling company. This process includes running weekly safety meetings in order to come up with ways to ensure the safety of workers. These professionals may also run simulations or drills for emergency situations. Drillers may ensure that roughnecks take all property safety precautions around machinery.

## **Emergency**

In the event of an emergency, assistant drillers will sound an alarm and secure all equipment. They report all accidents in the form of injury and damage reports to the senior driller. These assistants may direct oil rig evacuation procedures and will halt the movement of moving machinery. In rough weather conditions, assistant drillers will secure the drilling site until operations are resumed.

**Training method: Instructor-led/Correspondence**, Videos, drilling Operations and Equipment practice on the Rig. Student will work along with drilling crews during rig training.

**Note:** Students who cannot take classroom option may take correspondence or distance learning option. Practical rig training is mandatory for all students.

## **PART 1 Course Outline**

### **A. Drilling Technology**

- DT Level 1- Introduction to Rotary Drilling
- DT Level II- Routine Drilling Operations
- DT Level III- Special Drilling Operations

### **B. Man Management and Rig Management**

## **Part 2**

### **Competent Person Practical Rig Training**

Practical on the Job training will be applied in the fields and all Asst. Driller trainees will undergo practical training against set-forth Tasks Sheets for Floorman, Derrickman and Asst. Driller level. During training, all trainees will work alongside with drilling crews

## **Appendix 1**

### **Floorman Level**

#### **Units of Competence**

- Floorman elements of performance. Use and maintain tongs, slips etc.
- Floorman- elements of performance - maintain primary equipment
- Floorman- elements of performance - tripping drill string
- Floorman- elements of performance – housekeeping
- Floorman- elements of performance - air tuggers
- Floorman- elements of performance - pick up and lay out drill string
- Floorman- elements of performance - inspect drill string
- Floorman- elements of performance - harness and riding belts
- Floorman- elements of performance - hand tools
- Floorman- elements of performance - knowledge of drilling equipment
- Floorman- elements of performance - slip and cut
- Floorman- elements of performance – Chickasaws
- Floorman- elements of performance - BOPs

## **Appendix 2**

### **Derrickman level**

#### **Units of Competence**

- To understand the pumps.
- To understand the pit room valve system.
- To be able to maintain mud pumps - mixing pumps.
- To be able to maintain solid control equipment.
- To be able to work the derrick and maintain same.
- To be able to take and record pit volumes, weights and viscosity.
- To keep good housekeeping in shakers, pump room, pit room and derrick.
- To maintain specialised tools for mud pumps, shakers, desanders, desilter, degasser.
- To maintain safe working standards when working on pumps, shakers, desanders, desilter and degasser.
- To be able to use and maintain air tuggers.
- To be able to slip and cut drilling line.
- To understand the pump system.
- To understand the mixing system.
- To understand the bulk chemical system.
- To be able to nipple up and down BOP's.

**The following Derrickman task in the field will be done at the rig site.**

- Derrickman - elements of performance - mud pumps
- Derrickman - elements of performance - pit valve system
- Derrickman - elements of performance - maintain pumps
- Derrickman - elements of performance - solid control equipment
- Derrickman - elements of performance - derrick work
- Derrickman - elements of performance - pit records
- Derrickman - elements of performance - good housekeeping
- Derrickman - elements of performance - special tools
- Derrickman - elements of performance - safety on equipment
- Derrickman - elements of performance - air tuggers
- Derrickman - elements of performance - slip and cut
- Derrickman - elements of performance - pump system
- Derrickman - elements of performance - mixing system
- Derrickman - elements of performance - bulk chemical system
- Derrickman - elements of performance - BOP's

**Appendix 3**  
**Assistant Driller Level**

**Units of competence**

- To ensure equipment is ready for future operations.
- To organise crew for task being done.
- To see that maintenance of drilling equipment is carried out.
- To change out chart recorders.
- To ensure tubular count is correct.
- To relieve driller on brake.
- To relieve Derrickman at pumps or derrick.
- To understand circulating system.
- To understand mixing system.
- To understand manifold systems on drill floor - standpipe and choke.
- Be familiar with all aspects of drilling equipment and their uses.
- To maintain safety standards and housekeeping.
- To be able to nipple up and down BOP's.

**The following Asst. Driller task in the field will be done at the rig site.**

- Assistant driller - elements of performance – equipment Ready
- Assistant driller - elements of performance - organise crew
- Assistant driller - elements of performance – maintenance Drilling
- Assistant driller - elements of performance – chart Recorders
- Assistant driller - elements of performance - tubular count
- Assistant driller - elements of performance - relieve driller
- Assistant driller - elements of performance – relieve Derrickman
- Assistant driller - elements of performance – circulating System
- Assistant driller - elements of performance - mixing system
- Assistant driller - elements of performance - standpipe and Choke
- Assistant driller - elements of performance – drilling Equipment
- Assistant driller - elements of performance - safety and Housekeeping
- Asst. Driller - elements of performance - BOP's

For inquiries and registration contact the Course Cordinator on 07063474496 or send inquiries to **applications@bullmate.com**