



DRILLING OPERATION

Drilling Operation

STUCK PIPE AND FISHING OPERATIONS

Réf : OAG_SPFO_01



English training
ressources

5 Days

This course will cover a practical treatment of the causes of stuck pipe and the techniques that can be employed to avoid such problems. Participants will learn about investigation techniques covering the operation, selection, and use of fishing tools, including decision making methods. Wellbore recovery and techniques used to sidetrack the well will also be covered. This course has been designed to educate each participant on how to prevent fishing jobs and if they occur, what operation and techniques are available to recover the fish or how to sidetrack the well.

Prerequisites

Participants should have a fundamental understanding of drill strings and some exposure to well site drilling operations, as well as basic math skills.

Program

Day 1

Drilling and Hole Types

- Overview of drilling
- Hole designs and types
- Axial loads
- Drill string design

On the first day of the course, participants will receive a basic overview of drilling, which will cover hole designs and types. The day will move forward to cover axial loads in submerged tubulars, steel mechanics, and drill string design.

Day 2

Drill string and Stuck Pipe

- Drill string design (cont.)
- Causes and prevention of drill string failure
- Wellbore stability
- Stuck pipe

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STUCK PIPE AND FISHING OPERATIONS

Program continuation

Participants will learn more about drill string design and stuck pipe on the second day. The causes and preventions of drill string failure will also be discussed. A portion of the day will focus on teaching participants about wellbore stability. The day will end with stuck pipe definitions, mechanisms, consequences, and geometry causes.

Day 3

Stuck Pipe, Hole Cleaning, and Fishing

- Causes of stuck pipe
- Hole cleaning
- Fishing

Day three will focus on stuck pipe, hole cleaning, and fishing. Participants will learn about differential sticking and lost circulation. The last part of the day will focus on fishing, to include topics such as causes, prevention, tool types, and operations.

Day 4

Fishing and Directional Drilling

- Fishing tool selection and economics
- Directional drilling
- Plug back methods
- Open hole and cased hole

Participants will learn more about fishing and directional drilling on this day. Fishing tool selection and economics will be covered on this day. Directional drilling, plug back methods, open hole, and cased hole methods will be discussed as well.

Day 5

Sidetracking

- Reasons and considerations
- Effects on future operations
- Open and cased hole

The last day will focus completely on teaching participants about sidetracking. Specific topics that will be covered include the reasons to sidetrack, considerations, and the effect on future operations. Two types of sidetracking will also be covered, open hole and close hole.

Drilling Operation

STUCK PIPE AND HOLE CLEANING

Réf : OAG_SPHC_02



English training
ressources

2 Days

A practical treatment of the causes of stuck pipe concentrating on (poor) hole cleaning as a primary cause. Covers drill string design, wellbore stability and lost circulation. Detailed discussion on the key elements of stuck pipe together with drilling fluids, hole cleaning and cuttings behavior.

Prerequisites

Participants should have a fundamental understanding of drill strings and some exposure to well site drilling operations, as well as basic math skills.

Program

Day 1

- Introduction
- Causes of Stuck Pipe
- Proper Casing Setting Depth
- Forces Acting on Submerged Objects
- Drill String Design
- Well Bore Stability
- Lost Circulation
- Stuck Pipe: Mechanisms and Consequences
- Stuck Pipe: Wellbore Geometry

Day 2

- Stuck Pipe: Differential Sticking
- Stuck Pipe: Solids
- Economics of Hole Recovery
- Drilling Fluids
- Drilling Fluids Selection and Rheology
- Solids Control and Hole Cleaning
- Drilling Fluids Management
- Cuttings Behavior Transport Methods
- Special Well Profile Problems
- Hole Cleaning Monitoring and Management Techniques Review



DRILLING CALCULATIONS

Réf : OAG_DRCA_03



English training
ressources

4 Days

To give the professional junior drilling staff the necessary knowledge regarding common formulas and calculations used in the oilfield. Participants are also introduced to well control principles and kill sheets, prior to attending their first well control course.

Learning Objectives

To be able to:

- Understand basic calculations used in well control
- Drill and shut in well on the Drillsim 5000 simulator or available simulator
- Fill in the IWCF kill sheet for surface and subsea kill operations
- Use the drilling data handbook to obtain various tubular data
- Obtain sufficient knowledge about the course content to pass a written test with minimum 70% score

Prerequisites

Participants must have done a Basic Mathematics course, Drilling Technology 1 and 2 certificates and sufficient practical experience.

Program

- Practice with American oilfield units of measure
- Practice with oilfield calculations and formulas (volume, capacity and displacement)
- Effect on dynamic system pressures due to changes in density and pump rate
- Causes for different pressures and strengths in formations
- Hydrostatic pressure in gas and fluid
- U-tube calculations
- Gas law
- Pressure versus depth diagrams
- Basic well control principles
- Well kill methods
- IWCF kill sheets surface and subsea
- Practical exercises on the Drillsim 5000 full-scale simulator or available simulator
- Oilfield terminology

Drilling Operation

DRILLING TECHNOLOGY 1

Réf : OAG_DTE1_04



English training
ressources

5 Days

To give the professional junior drilling staff the necessary understanding of the processes used during drilling operations. To give a better understanding of the history and the sources of petroleum and to learn some of the techniques, systems and equipment used in the process.

Prerequisites

Roustabout and higher positions.

Learning Objectives

To be able to:

- Understand basic well design principles and drilling technology
- Increase knowledge in casing design
- Understanding the cementing operation of a well
- Describe and understand the use of drilling equipment used in rotary drilling
- Increase knowledge in the use of well control equipment
- Obtain sufficient knowledge about the course content to pass a written test with minimum 70% score

Program

- Rig floor components and drilling equipment
- Drill string components
- General introduction to drilling technology
- Circulating system
- Casing and cementing
- Directional drilling
- Introduction to Surface and Subsea well control equipment
- Introduction to basic well control theory
- Practical exercises on the Drillsim 5000 full scale simulator
- Oilfield terminology



DRILLING TECHNOLOGY 2

Réf : OAG_DTE2_05



English training
ressources

5 Days

To give the professional junior drilling staff the necessary understanding of the processes used during drilling operations including drilling fluids, drilling fluid systems, fishing operations, well control operations and how to handle these safely.

Prerequisites

A Drilling Technology 1 certificate is required.

Learning Objectives

To be able to:

- Describe the circulating system components
- Understand the basic purposes of drilling fluid
- Safely make mud density and viscosity checks as required on a rig
- Obtain sufficient knowledge about the course content to pass a written test with minimum 70% score
- Describe the use of various solids control equipment
- Fill out a basic vertical kill sheet including pressure calculations

Program

- The circulating system
- Introduction to drilling fluid types and maintenance of same
- Solids control equipment
- Pressure calculations
- Well control problems and well kill methods
- Introduction to fishing operations and fishing equipment
- Introduction to Surface and Subsea well control equipment
- Practical exercise on the Drillsim 5000 full-scale simulator
- Oilfield terminology

Drilling Operation

INTRODUCTION TO DRILLING

Réf : OAG_INDR_06



English training
ressources

4 Days

To give an insight in the techniques used in the drilling of wells for oil and gas from the start to the completion and production. Furthermore the participant will learn some of the rare terminology which is used in the oilfield, and be given an insight in the purpose of using floating production storage and off-loading units.

Prerequisites

This course is intended for all new employees working in oilfield-related jobs including support functions for the oil and gas industry. This includes administrative personnel at shore-bases and offices and besides subcontractors' personnel and equipment suppliers' personnel. The course also includes introduction to FPSO operations.

Learning Objectives

To be able to:

- Name the most important parties involved in the drilling of a well
- Describe some of the organisation structures onboard and onshore
- Describe the main functions of a drilling rig and it's equipment
- Understand some of the most common terms used in the oilfield
- Name the purpose of FPSO units

Program

- The concession
- The oil company and the drilling contractor
- Types of drilling rigs
- Drilling organizations onshore and offshore
- The drilling process
- Rig move operations
- Types and design of drilling rigs
- Shore-bases
- Examples of subcontractors involved in drilling a well
- The drilling rig and it's components
- Example of drilling of a well from spud-in to completion
- Core sampling operations
- Casing and cementing operations
- Pressures in the well from the formation and from the drilling fluid
- Examples of drilling problems and possible solutions
- Drilling fluid and the circulation system
- Exercises on Drillsim 5000 full scale simulator or available simulator
- The background for using FPSO units and example of design and equipment onboard
- Benefits from the use of FPSO units



INTRODUCTION TO DRILLING TECHNOLOGY (FOR NON-DRILLERS)

Réf : OAG_IDTN_07



English training
ressources

3 Days

To learn the various phases of a drilling operation.

Audience

Suitable for administrative and technical personnel in staff/support positions in operator-, drilling-, consultancy- and service-companies.

Prerequisites

None.

Learning Objectives

Upon completion of this course, participants should be able to describe the various phases of a drilling operation. They should be able to identify, state the position and give an account of how drilling equipment is used on a platform.

Program

During the course you will go through these subjects:

- Norwegian petroleum history
- Different platform types
- Drilling program for a floating platform
- Offshore drilling
- Preliminary drilling operations
- The well
- Rotary drilling
- Directional drilling
- Drilling fluids, including circulation system and drilling fluid report
- Cementing
- Pressure control
- Drilling problems
- Fishing operations and equipment
- Well test
- Drilling at the edge
- UBD and MPD
- Dual gradient drilling

Drilling Operation

Forage pour non Foreur

Réf : OAG_FNF_20



Support de formation
en français

7 jours

Objectifs

Les opérations de forage et les différentes phases et les objectifs pour chaque phase et les boues utilisées et les opérations spéciale en cours de forage (Carottage et DST) et les opérations de descente tubage et cimentation

Public

Ce cours est bénéfique pour les opérateurs, techniciens, superviseurs qui manipulent et supervise les operations liés au forage

Program

Jour 1

- Conduite de forage
- Les outils de forage
- Les garnitures de forage
- Les objectifs d'un forage

Jour 2

- Descente tubage
- Les operations de Cimentation
- Les restaurations d'un tubage

Jour 3

- Surveillance géologique
- Carottage
- Diagraphies

Jour 4

- Forage a la turbine
- Forage horizontal
- Forage au coil tubing

Jour 5

- Complétion
- Equipement de surface d'un puits

Jour 6

- Prévention des eruptions
- Well control

Jour 7

- Exercise Pratique



INTRODUCTION TO DRILLING FOR ENGINEERING

Réf : OAG_IDFE_08



English training
ressources

5 Days

This, Introduction to Drilling, course is intended for individuals who will be working closely with drilling departments within their companies. This course will give participants a complete understanding of the processes involved in the drilling of oil and gas wells.

On each day, there will be a daily, instructor led presentation. The course material that is provided to each participant will contain sufficient attached notes to form a basic manual.

To reinforce the learning opportunities there will be simple exercises requiring a basic understanding of mathematics.

Learning Objectives

Who should attend ?

This course is intended for everyone in finding out about drilling. It will give an understanding of drilling to non-drilling professionals

Audience

This course is intended for everyone in finding out about drilling. It will give an understanding of drilling to non-drilling professionals

Program

Day 1 Well Construction Overview

- Drilling in the Exploration and Production (E&P) process
- Well construction risks
- Roles and responsibilities of the team
- Rig types and equipment

The first day of this course will give participants a general overview of well construction. They will learn where drilling fits into the exploration and production process and its interaction with other domains. Participants will also learn what information is required and available for the well construction group. Different risks involved in well construction, as well as the roles and responsibilities of the wellsite and office drilling teams will be covered. The different rig types

Day 2 Well Design

- Well planning and design process
- Timeline and long lead times
- Drilling fluids
- Basic casing and cementing

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Drilling Operation

INTRODUCTION TO DRILLING FOR ENGINEERING

Program continuation

Day two will focus on the design of a well. Participants will get the chance to learn about data inputs, typical timelines, long lead times, offset well analysis, and well timing. Costs, risks, AFE generation and the impact of surface constraints will also be covered. The day will end with a discussion over rig capability, fluid selection, basic casing, and cementing.

Day 3 Directional Drilling and Deviation Control

- Different types and applications
- Bit types, features, and applications
- Log data
- Steerable and coordinate systems

On the third day participants will focus on directional drilling and deviation control. Several types of directional wells and their applications will be covered, as well as the different deflection tools and directional BHAs. The types, features, and applications of bits will be covered, along with log data and offset information. Participants will also learn about log data and offset information. The day will end with a discussion over steerable systems, geodetics, coordinate systems, and the requirements of wellbore surveying.

Day 4 Well Control

- Kick causes, prevention, and detection
- Underground and surface blowouts
- Well control equipment

Day four will teach participants about well control. Kick causes, prevention, and detection will be the focus of this day. This day will also cover the significance of underground and surface blowouts. The cause and significance of shallow gas, as well as the prevention through the use of shallow gas seismic surveys will be discussed. The day will end with attendees learning about typical well control equipment such as drilling BOPs, wireline pressure control equipment, and Christmas trees.

Day 5 Well Execution and Real-Time Operations

- Well construction activities
- Typical drilling problems and operations risks
- Real-time concepts, infrastructure, and monitoring
- Interpreting real-time measurements

Well execution and real-time operations will be the main topics covered on the last day. Participants will get the opportunity to learn about well construction activities, typical drilling problems, and operation risks. They will also learn about real-time concepts, infrastructure, and monitoring.

Interpreting real-time measurements will also be discussed.



DRILL THROUGH EQUIPMENT

Réf : OAG_DTEQ_09



English training
ressources

5 Days

This, Introduction to Drilling, course is intended for individuals who will be working closely with drilling departments within their companies. This course will give participants a complete understanding of the processes involved in the drilling of oil and gas wells.

On each day, there will be a daily, instructor led presentation. The course material that is provided to each participant will contain sufficient attached notes to form a basic manual.

To reinforce the learning opportunities there will be simple exercises requiring a basic understanding of mathematics.

Learning Objectives

Who should attend ?

This course is intended for everyone in finding out about drilling. It will give an understanding of drilling to non-drilling professionals

Program

Day 1 Surface mud flow network

- Choke and Kill Manifolds
- Mud / Gas Separator system
- Diverter System
- Rotating head
- Pressure control while drilling (PCWD)
- Gate Valves and actuators
- Gate Valves General
- Choke Valves
- Manual Operated Choke
- Remote Operated Choke
- Check Valves
- Check Valves – Plug type
- Check Valves – Dart type

Day 2 Surface BOP's

- Ram Preventers in General
- Recommendation
- Response time
- Hang-Off Test
- Function testing
- Pressure Testing
- Inspection and Test Procedures

Drilling Operation

DRILL THROUGH EQUIPMENT

Program continuation

- Ram packer pressure
- BOP Ratios
- Cameron U-type
- Hydril Ram Preventer
- Shaffer Rams
- Shaffer ram blocks and ram packer design
- Koomey Ram BOPs

Day 3 Annular preventers

- Annular general
- Recommendation
- Response time
- Function test
- Pressure test
- Frequency of Pressure test
- Hydril
- Hydril GK
- Hook up configurations for Hydril GL Chamber
- Packing unit selection
- Connections and Gaskets
- General
- Ring Groove
- Face to face contact contra distance Make-up
- Ring Gaskets
- Flange and clamped hub connections

Day 4 Surface BOP Control Systems

- General Description
- Surface Accumulator unit schematic
- 3 position 4 way valves
- The Accumulator bottles
- Hydraulic Regulators
- TR regulator
- Control System volumetric capacity
- Accumulator bottles and manifolds
- Pre-charge
- Pump Systems
- Remote Control Panels: General
- The Hydraulic Power Unit and Surface Control manifold

- Introduction to Casing Heads
- Tubing heads
- Christmas Trees

Day 5 Auxiliary Equipment

- The Inside Blowout preventer
- Drill Pipe Safety valves
- Kelly and Top Drive valves.
- Drop down check guard valves
- Drill Pipe Float valves
- Test Tools
- Classroom Exercises
- Manifolds and valves group work
- Diverters group work
- Annular BOPs Group work
- Ram BOPs Group work
- Control Unit group work



HPHT OPERATIONAL AWARENESS AND DRILLING CHALLENGES

Réf : OAG_HPHT_10



English training
ressources

5 Days

This course covers all major aspects of HPHT well construction projects. It covers the theories, technicalities and practicalities of HPHT wells complete with impending risks and challenges. This course is also equipped with case studies on both successful HPHT well projects and the mistakes of past projects. Special emphasis is placed on Geopressure detection analysis. There are also practical exercises and assessments throughout this course with interactive discussion to meet the specific needs of all the participants.

This course aims to equip participants with the knowledge and understanding on ways to overcome the challenges and risks in HPHT wells while elevating the effectiveness of their HPHT wells practices, giving special emphasis on methods to detect and analysis Geopressures in HPHT wells.

This focus of this training is more than merely imparting technical knowledge; it works on improving communications and personal focus. At the end of this HPHT training, the attendees will have obtained a much improved understanding of the challenges which will be faced and the mitigations required to minimize the probability of failure. Team building, safety leadership and communication skills are key elements addressed in the course.

Audience

Drilling Employees who will involve in drilling HPHT Wells

Prerequisites

At least 5 years of experience in well construction and understanding of HTHP well issues.

Drilling Employees who will involve in drilling HPHT Wells

Program

Day 1

- Introduction
- HPHT Overview - Defining the HPHT Environment
- Geological & Geophysical Aspects of Abnormal Pressures
- Highlights of Previous Challenges Faced in HPHT Wells
- Understanding the Differences Between HPHT Drilling and Normal Well Operations
- Domino Theory

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Drilling Operation

HPHT OPERATIONAL AWARENESS AND DRILLING CHALLENGES

Program continuation

Day 2

- Operational Front End Planning Requirements
- HPHT Drilling Practices
- HPHT Specific Equipment Overview
- Ensuring Mitigation of Challenges Faced in Earlier HPHT Wells
- Losses/Gains - Understanding Supercharging, Frac Fills, Ballooning
- HPHT Well Control - on bottom, while stripping, out of hole

Day 3

- Drilling Definitions
- Water versus Oil Based Muds
- Gas Solubility Effects in an Oil Based Mud
- Fingerprinting the Well
- Alternative Drilling Fluids
- Pit Discipline

Day 4

- Ensuring a Highly Visible Safety Culture
- Managed Pressure Drilling
- Applications in HPHT Operations
- Case History - Lessons Learned from Macondo
- WellCasing Design Considerations in HPHT Wells

Day 5

- HPHT New Technology for Formation Evaluation
- Cementing Practices
- HPHT Testing Practices
- Course Review and Wrap Up



Forage et Cimentation

Réf : OAG_FC_17



Support de formation
en français

7 jours

Objectifs

Préparation du trou avant la descente tubage et l'opération de cimentation simple étage et double étage et descente et la cimentation d'un Liner et la restauration des mauvaises cimentations

Public

Les opérateurs, techniciens, superviseurs qui manipulent et supervise les opérations de cimentations. Ce cours est destiné pour les techniciens qui ont travaillé sur les unités de cimentation mais n'ont pas encore une qualification requise

Programme

Jour 1

- Préparation du trou avant la descente du tubage
- Role du tubage
- Les différentes colonnes du tubage
- Caractéristique d'un tubage

Jour 2

- Le choix des tubages
- L'habillage de la colonne de tubage
- Préparation de la colonne du tubage

Jour 3

- Les équipements de manutention de tubage
- Descente tubage
- Précaution à prendre pendant la descente tubage

Jour 4

- Préparation pour cimentation
- Les équipements de cimentation
- Calcul de cimentation

Jour 5

- Cimentation à Simple étage
- Cimentation à Double étage avec DV

Jour 6

- Descente et Cimentation Liner (Colonne perdu)
- Les problèmes et solution

Jour 7

- Exercice Pratique

Drilling Operation

Les Outils de Forage et Carottage

Réf : OAG_OFC_21



Support de formation
en français

7 jours

Objectifs

Les outils à molettes et les couronnes de carottage et leurs domaines d'utilisation
Plus les outils utilisés dans le domaine de coild tubing

Public

Ce cours est bénéfique pour les opérateurs, techniciens, superviseurs qui manipulent et supervise les operations special. Il est destiné pour les techniciens qui ont travaillés sur les chantiers des opérations spécial mais n'ont pas encore une qualification requise

Programme

Jour 1

- Introduction
- Historique et conception des outils a molettes
- Fabrication des outils a molettes
- Caractéristique des outils a molettes

Jour 2

- Hydrauliques des outils a molettes
- Les Outils a élément fixe ou PDC
- Historique et conception des outils a PDC

Jour 3

- Fabrication des outils PDC
- Caractéristique des outils PDC
- Hydraulique des outils PDC

Jour 4

- Classification des outils a molettes
- Classification des outils PDC

Jour 5

- Sélection des outils a molettes
- Sélection des outils PDC

Jour 6

- Historique et conception des outils de Carottage
- Conception d'un carottier
- Les outils utilisés dans le coild tubing

Jour 7

- Exercice Pratique



Les risques associés pendant les opérations de forage et production

Réf : OAG_RAOF_14



Support de formation
en français

5 jours

Objectifs

Maitriser la politique et la réglementation dans le domaine pétrolier et prendre les mesures de prévention fiable.

Public

Tout les producteurs et foreurs et les métiers de support

Program

- La réglementation Algerienne
- La réglementation Sonatrach et ses filiales
- Definition des risques
- Le triangle de feu
- Analyse de risque
- Les barrières de sécurité pendant la production et forage
- Le risque lié à l'homme et installation.
- Le risque lié au produit chimique
- Le permis de travail
- Type, les intervenants ; domaine d'utilisation
- Exemple pratique
- La lutte contre incendie moyens et procédures
- Problèmes scenarios et solutions

Drilling Operation

Professional Training FOR Rig Assistant

Réf : O&G_PTRA



English training
ressources

62 Days

Students learn the overall operations of what's involved in drilling a well which includes introduction, people, drilling theory, rig equipment, rig components, roles and responsibilities, oral and hands on Drilling Rig demonstrations and exams to assess their learning abilities. Once completed, students should be able to work safely and effectively among co-workers with a clear understanding of what's happening around them.

Audience

Any individual seeking the knowledge of Drilling Operations to provide a service recommended for:

Office Personnel, Entry Level Employees, Engineers, Drilling Crew, Deck Crew, Rig Move coordinators, Office Based Geologists, Office Based Logistics Coordinator and Logistics Supervisor, Casing Running Personnel / Casing Crew (non-supervisory), Downhole Equipment Specialists / Operators, Measurement While Drilling and Logging While Drilling (MWD / LWD) Personnel, Surveying Engineer, or Operator Other Non - Supervisory and Non - Critical Drilling or Intervention Personnel, Oilfield Equipment Repair Personnel, Tubular and Rig Inspection Personnel Wireline / Slickline Crews (Non -Supervisory)

Program

MODULE 01 Safety Training Program	08 Days
MODULE 02 English Training Program	
English for BEGINNERS	72 Hrs - 10 Days
English for ELEMENTARY	72Hrs - 10 Days
OIL AND GAS ENGLISH PRE INTERMEDIATE	72Hrs - 10 Days
MODULE 03 Introduction to Drilling Technology	05 Days
MODULE 04 Introduction to Drilling Operations	05 Days
MODULE 05 Operations and Equipment in Land Drilling Operations	05 Days
MODULE 06 Soft Skills	04 Days
MODULE 07 IWCF Drilling Well Control Level 2	05 Days



Boues de Forage et Fluide de Completion

Réf : OAG_BFFC_19



Support de formation
en français

7 jours

Objectifs

Les fluides de forage doivent avoir des propriétés telles qu'ils facilitent, accélèrent le forage, favorisent ou tout au moins ne réduisent pas d'une manière sensible et permanente les possibilités de production des sondages

Public

Les opérateurs, techniciens, superviseurs qui manipulent et supervise les opérations les opérations d'intervention special. Ce cours est destiné pour les techniciens qui ont travaillés sur les chantiers des opérations spécial mais n'ont pas encore une qualification requise

Programme

Jour 1

- Role de la boue
- Les differentes types de boue
- Les caracteristiques des boues

Jour 2

- Les boues a base d'eau
- Les boues a base d'huile
- Préparation du fluide de forage

Jour 3

- Les principaux produits a boue
- Les fonctions des produits a boue
- Précaution a pendant la preparation de la boue

Jour 4

- Contamination des boues de forage
- Conversion des boues douce en boue salé saturée
- Boues salée saturée remplacer par une boue douce

Jour 5

- Système du circuit de la boue
- Ordre de fabrication et traitement du circuit de boue

Jour 6

- Les bouchons de colmatant ou LCM
- Problèmes et solution

Jour 7

- Exercice Pratique

Drilling Operation

COMPANY SUPERVISOR DEVELOPMENT PROGRAM

Réf : O&G_CMD



English training
ressources

27 Weeks

Objectifs

- The main objectives of this program is to analyze the competency development needs for the SONATRACH Company Man of the role based competencies and align them to the industry

Program Overview

The program is laid down on a ONE YEAR calendar i.e. for the 4/4 rotation the program is proposed for 6 rotations.

A Total of 28 weeks to cover the following development:

1. The first **PHASE 1- Total 4 Weeks** is an ENGLISH language training program.
2. The second **PHASE 2- Total 23 Weeks** will FOCUS only on the role based competencies based on a GAP ANALYSIS and aligned to the industry requirements and aligned to the SONATRACH COMPANY MAN job descriptions.

Module 01 SAFETY Training PROGRAM

Module 02 Petroleum Geology & Formation Evaluation On the Job Training (OJT):
OJT 1 - Floorman & Roustabout

OBJECTIVES

- On completion of this module, THE STUDENT should be able to demonstrate a clear understanding of Role based competencies for the Floorman and Roustabout to be performed during the OJT training.
- Basic Roustabout tasks and how to perform them safely and competently.

Task List

- Adhering to HSE policies and procedures; Observation systems; PTW...etc
- Rigging and Slings operations
- Care and Handling of Drill Pipe.
- Painting operations.
- Forklift Operations
- Confined Space Entry and PTW.

Module 03 Drilling Rig Equipment & Drill String



COMPANY SUPERVISOR DEVELOPMENT PROGRAM

Module 04 OJT 2 - Floorman Role based Program

OBJECTIVES

- On completion of this module, THE STUDENT should be able to demonstrate a clear understanding of:
 - The role and responsibilities of the Floorman (also called Rotary Helper or Roughneck).
 - Perform basic Floorman tasks safely and competently.

Task List

- Rotary Rig and its Components.
- The Drill Bits.
- Drill String and Drill Collars.
- Rotary, Kelly, Swivel, Tongs, and Top Drive.
- The Blocks and Drilling Line.
- The Drawworks.
- Drilling Fluids, Mud Pumps, and Conditioning Equipment.
- The Auxiliaries.
- Care and Handling of Drill Pipe.

Module 05 Drilling Fluid & Hydraulics

Module 06 CASING AND CEEMENTING OPERATIONS

Module 07 OJT 3 - Assistant Driller

OBJECTIVES

On completion of this module, THE STUDENT should be able to:

- Demonstrate a clear understanding of the role and responsibilities of the Assistant Driller.
- Perform basic Assistant Driller tasks safely and competently.

Task List

- General Safety Topics.
- General Rig Floor.
- Working With The Drill String.
- Running and Cementing Casing.
- Well Control and Related Equipment.
- Equipment Maintenance.
- Moving Operations on Land Rigs.

Module 08 Drilling Technology

Module 09 Drilling calculation

Drilling Operation

COMPANY SUPERVISOR DEVELOPMENT PROGRAM

Module 10 Continued On Job Training OJT 3 - Assistant Driller

OBJECTIVES

On completion of this module, THE STUDENT should be able to:

- Demonstrate a clear understanding of the role and responsibilities of the Driller.
- To be able to undertake the Assistant Driller tasks safely and competently.

Task List

- General Safety Topics.
- General Rig Floor.
- Working With The Drill String.
- Running and Cementing Casing.
- Well Control and Related Equipment.
- Equipment Maintenance.
- Moving Operations on Land Rigs.

Module 11 Special Drilling Operations

Module 12 DRILLING OPERATIONS PROBLEMS - LOST CIRCULATION, STUCK PIPE & FISHING.

Module 13 OJT 4 - Driller

OBJECTIVES

On completion of this module, THE STUDENT should be able to:

- Demonstrate a clear understanding of the role and responsibilities of the Driller.
- Perform basic Driller tasks safely and competently.

Task List

- General Safety Topics
- Drilling equipment topics
- Control & instrumentation topics
- Tripping operations topics
- Drilling operations topics
- General rig floor operations topics
- Down hole equipment & fishing topics
- Well control topics
- Casing & cementing topics
- Well completion topics
- Administration and management topics
- Rig moving topics

Module 14 PROGRAMMES, PROCEDURES AND DRILLING MANAGEMENT

Module 15 WELL COMPLETIONS & WORK OVER OPERATIONS



COMPANY SUPERVISOR DEVELOPMENT PROGRAM

Module 16 OJT 5 - Assistant Well Site drilling Supervisor

OBJECTIVES

On completion of this module, THE STUDENT should be able to:

- Demonstrate a clear understanding of the role and responsibilities of the Assistant Well Site drilling Supervisor.
- Perform basic Assistant Well Site drilling Supervisor tasks safely and competently.

Task List

- General Safety Topics
- Drilling operations topics
- Drilling engineering topics
- Rig commissioning topics
- Drilling equipment topics

Module 17 IWCF Drilling Well Control Level 4

Module 18 Soft Skills for drilling supervisor

- Problem solving
- Team building
- Critical thinking
- Situation awareness
- Supervision & leadership
- Presentation skills
- Technical report writing