

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR HYDROCARBON SECTOR

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

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Qualifications Pack- Assistant Technician-Drilling (Oil & Gas)

SECTOR:HYDROCARBON

SUB-SECTOR: Upstream

OCCUPATION: Production

REFERENCE ID: HYC/Q 0101

ALIGNED TO: NCO-2015/8113.0100

Brief Job Description:The Technician-Drilling (Oil & Gas) is to carry out the drilling operation task like Rig building, Rig dismantling, Top man operation, Rig floor, operation, cementation job and other drilling activities and operate Drill floor operations to drill shallow as well as deep holes for exploring and exploiting Oil & Gas. This operation is a specialized task that can be safely perform only with adequate training and experience. The individual should have knowledge for performing basic maintainance of the machine.

Personal Attributes: Personal Attributes: This job requires the individual to have good problem solving Skills, knowledge of Hydrocarbon Sector, Drilling process and systems would be an added advantage. Additional skills including communication skills strong customer service, strong problem solving skills ; should be self motivated; should be able to apply practical judgement to successfully perform the assigned responsibilities and a team player with ability to work with team and under pressure.

Qualifications Pack Code	HYC/Q 0101		
Job Role	Assistant Technician- Drilling (Oil & Gas)		
Credits(NSQF)	TBD	Version number	1.0
Sector	Hydrocarbon	Drafted on	31/03/2017
Sub-sector	Production	Last reviewed on	31/03/2017
Occupation	Poduction	Next review date	31/03/2019
NSQC Clearance on*	09/10/2017		

Job Role	Assistant Technician Drilling (Oil & Gas)
Role Description	This role is vital to the safe and effective Drilling Best Practices for Oil and Gas Industry. This role can be based at an Onshore based oil and gas Production facility or an offshore production facility.
NVQF level	4
Minimum Educational Qualifications Maximum Educational Qualifications	Class XII <u>or</u> Class X+2 year of ITI course Diploma or equivalent
Training	Knowledge of basic machine tools handling would be an added advantage
Experience	0-2 years
Minimum Job Entry Age	18 Years
Applicable National Occupational Standards (NOS)	Compulsory: <ol style="list-style-type: none"> HYC/N 0101 Perform Drilling Operation HYC/N 0102 Occupational health and safety (OHAS) HYC/N 0103 Working effectively with colleagues and supervisor
Performance Criteria	As described in the relevant OS units

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard , which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS , these include communication related skills that are applicable to most job roles.

Keywords /Terms	Description
SHE	Safety Health & Environment
OHS	Operational Health & Safety

National Occupational Standard



Overview

The Unit is about petroleum well drilling procedures, its mechanics, and design methodology. The NOS gives an overview of drilling rig operations and related equipment; offshore drilling and advanced drilling tools; drill-string design; drill bit technology; drilling hydraulics; drilling mud design; cementation design; pore pressure and fracture pressure calculations; basic casing design; basic well control; well planning; directional drilling etc

Unit Code	HYC/N 0101
Unit Title (Task)	Perform Drilling Operations
Description	This unit is about performing drilling operations at Oil & Gas well site.
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> • Oil & Gas Drilling Processes • Drilling Techniques • Basic Operation and Maintenance Techniques • Health and Safety in Production operations and Maintenance jobs
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Drilling Process	<p>To be competent, the user/individual on the job must be able to</p> <p>PC1. Understanding and knowledge of the types of Oil & Gas Wells</p> <ul style="list-style-type: none"> • Exploratory well • Developmental well • Geopressure/geothermal well • Stripper well • Multiple completion well • Injection well • Service well <p>PC2. Understand Platform types for underwater drilling Submersible barges and platforms</p> <ul style="list-style-type: none"> • Shallow water complex • Gravity base • Compliant towers • FPSO: Floating Production, Storage and Offloading • Floating platforms • Jack-ups (on legs) • Tension Leg Platform (TLP) • Semi-submersible platforms • Drilling barges • Drill ships • Fixed on site platforms • Sub-sea templates <p>PC3. Knowledge of the on shore Well Components</p> <p>PC4. Identify Upstream process sections: Wellhead, Manifolds and gathering, Separation, Metering, storage and export and Utility systems</p> <p>PC5. Understanding the Components of Drilling Rig (derrick, floor, drawworks, drive and mud handling, drill string, Drill Collar, Blowout Preventer, turn table, Crown Block, Top drive, Iron Roughneck, Mud Pumps.)</p>

	<p>PC6. Understanding the components of Well: Well casing - Conductor casing, Surface casing, Intermediate casing, Production casing. Use of tubing and Packer and Completion (Open hole completions, Conventional perforated completions, Sand exclusion completions, Permanent completions, Multiple zone completion, Drainhole completions)</p> <p>PC7. Understanding of working at height, operation at monkey board, top man escape device</p> <p>PC8. Knowledge of the Wellhead</p> <ul style="list-style-type: none"> • Dry or subsea completion • Casing head and casing hangers • The tubing hanger • Master gate valve • Pressure gauge • Wing valve • Swab valve • Variable flow choke valve • Vertical tree • Subsea wells (umbilical) • Injection <p>PC9. Perform Artificial lift operation: Rod pumps, electrical submerged pump (ESP), Gas lift and Plunger lift</p> <p>PC10. knowledge of the Well workover, intervention and stimulation</p> <p>PC11. Understanding Manifolds and gathering</p> <ul style="list-style-type: none"> • Pipelines and risers • Production, test and injection manifolds
<p>Drilling Techniques</p>	<p>PC12. Understanding/knowledge of the Drilling Methods</p> <ul style="list-style-type: none"> • Drilling rigs • Percussion or cable drilling • Rotary drilling • Rotary percussion drilling • Electro and turbo drilling • Directional drilling • explosive drilling and flame piercing <p>PC13. Perform Abandonment Process</p> <p>PC14. Perform drilling Operations</p> <ul style="list-style-type: none"> • Drilling techniques • Drilling mud • Casing and cementation <p>PC15. Understanding Completion, Enhanced Recovery and Workover Operations</p> <p>PC16. Understand a Typical Drilling Program</p>

<p>Basic Maintenance Techniques and Practices</p>	<p>PC17. Prepare for basic routine maintenance tasks PC18. Describe basic routine maintenance techniques PC19. Carry out basic routine maintenance tasks PC20. Carry out basic inspections PC21. Identify the use of basic maintenance hand tools PC22. Demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact PC23. Demonstrate the care of basic maintenance hand tools</p>
<p>Knowledge and Understanding (K)</p>	
<p>A. Organizational Context (Knowledge of the company / organization and its processes)</p>	<p>The user/individual on the job needs to know and understand: KA1. Organisational SOP on Drilling Process KA2. Risk and impact of not following defined procedures/work instructions KA3. Escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures KA4. records to be maintained and implications of non-maintenance of the same KA5. SHE and OHS guidelines and regulations as per company’s norms</p>
<p>B. Technical Knowledge</p>	<p>The user/individual on the job needs to know and understand: KB1. Basic Oil & Gas Drilling Process and Operations KB2. Basic Maintenance Hand Tools KB3. Basic Measuring and Marking-out Instruments KB4. Basic Engineering Communications KB5. Basic numerical Skills KB6. Physical Science and Basic Properties of Materials</p>
<p>Skills (S)</p>	
<p>A. Core Skills/ Generic Skills</p>	<p>Basic Reading & Writing Skills</p>
	<p>The user/ individual on the job needs to know and understand how to: SA1. Fill up appropriate technical forms, activity logs in required format of the company SA2. Maintain proper records as per given format SA3. Read and understand manuals, work orders, health and safety instructions, memos, reports etc.</p>
	<p>Communication Skills</p>
<p>The user/ individual on the job needs to know and understand how to: SA4. Corteous to the customers SA5. Liaisoning and coordination skills SA6. Communicate with supervisor and peers SA7. Communicate in the local language (preferable)</p>	

B. Professional Skills	Plan and Organize
	The user/individual on the job needs to know and understand: SB1. Plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB8. NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB2. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB3. Identify immediate or temporary solutions to resolve delays SB4. Identify sources of support that can be availed of for problem solving for various kind of problems SB5. Seek appropriate assistance from other sources to resolve problems SB6. Report problems that you cannot resolve to appropriate authority
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB7. Identify defects in the material and communicate it at the earliest and suggest SB8. improvements(if any) in process/material based on experience
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB9. apply problem-solving approaches in different situations SB10. refer anomalies to the line manager SB11. Escalate issues that cannot be solved as per the troubleshooting/company manual

NOS Version Control

NOS Code	RSC / N 0101		
Credits(NSQF)	TBD	Version number	1.0
Industry	Hydrocarbon	Drafted on	02/03/2017
Industry Sub-sector	Upstream	Last reviewed on	02/03/2017
Occupation	Production	Next review date	02/03/2019



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National Occupational Standard



Overview

This OS unit is about knowledge and practices relating to health, safety that candidates need to use in the workplace. It covers responsibilities towards self, others, assets and the environment. It includes understanding of risks and hazards in the workplace, along with common techniques to minimize risk, deal with accidents, emergencies, etc.

It covers knowledge of fire safety, common first aid applications, safe practices and emergency procedures.

Unit Code	HYC/N 0102
Unit Title (Task)	Occupational health and safety (OHAS)
Description	This unit is about Health and Safety in Production and Maintenance
Scope	<p>This unit/task covers the following:</p> <ul style="list-style-type: none"> Occupational health and safety (OHAS) Fire safety and emergency procedures Emergencies, rescue and first-aid procedures
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Health and safety	<p>To be competent, the user/individual on the job must be able to</p> <p>PC1. Use protective clothing/equipment for specific tasks like cutting, welding, repairing in pipeline jobs, well operations, maintenance inside the installation and work conditions during day to day work and during emergency</p> <p>PC2. State the name and location of people responsible for health and safety for the workplace and escalation matrix</p> <p>PC3. Identify job-site hazardous work and state possible causes of risk or possible accidents in the workplace</p> <p>PC4. Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role</p> <p>PC5. State location of general health and safety equipment in the workplace</p> <p>PC6. Inspect for faults, set up and safely use steps and ladders in general use</p> <p>PC7. Work safely in and around trenches, elevated places and confined areas</p> <p>PC8. Identify common risks and safety SOP in Oil & Gas production area</p>
Fire safety	<p>PC9. Use the various appropriate fire extinguishers on different types of fires correctly</p> <p>PC10. Identify and follow pro active and reactive fire fighting SOP in Oil & Gas production facilities</p> <p>PC11. Perform Fire Evacuation Steps</p> <p>PC12. Prepare incident Reports</p>
Emergencies, rescue and first-aid	<p>PC13. Availability of First Aid box & accessories</p> <p>PC14. Demonstrate how to free a person from electrocution</p> <p>PC15. Administer appropriate first aid to victims where required eg. in case of bleeding, burns, choking, electric shock, poisoning etc.</p>

procedures	<p>PC16. Administer appropriate first aid in chemical hazard</p> <p>PC17. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments</p> <p>PC18. Follow SOP in Oil & Gas Drilling Facilities</p> <p>PC19. Use/Propoer utilization of breathing apparatus</p> <p>PC20. Ensure emergency preparation and resonse</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	<p>The user/individual on the job needs to know and understand:</p> <p>KA1. Names (and job titles if applicable), and where to find, all the people responsible for health and safety in a workplace</p> <p>KA2. Names and location of documents that refer to health and safety in the workplace.</p> <p>KA3. Risk and impact of not following defined procedures/work instructions</p> <p>KA4. Escalation matrix for reporting identified incidents, troubles and/ or emergencies e.g. system failures ,fire and power failures</p> <p>KA5. Records to be maintained and implications of non-maintenance of the same</p> <p>KA6. SHE and OHS guidelines and regulations as per company's norms</p> <p>KA7. Understanding of 5S and Housekeeping</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. Occupational health and safety</p> <p>KB2. Hazards and its effects and risk assessment</p> <p>KB3. Safe Working Practices</p> <p>KB4. Use of different types of PersonalProtectiveEquipments(PPE)</p> <p>KB5. Various types of Fire Fighting Equipments& its uses in different conditions</p> <p>KB6. Standard Operating Procedures in Oil and Gas Safety w.r.t. occupational health & safety</p> <p>KB7. Risk Management and reporting</p>
Skills (S)	
A. Core Skills/ Generic Skills	Basic Reading & Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Fill up appropriate technical forms, activity logs in required format of the company</p> <p>SA2. Maintain proper records as per given format</p> <p>SA3. Read and understand manuals, work orders, health and safety instructions, memos, reports etc.</p>
	Communication Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA4. Corteous to the customers</p>

	<p>SA5. Liaisoning and coordination skills</p> <p>SA6. Communicate with supervisor and peers</p> <p>SA7. Communicate in the local language (preferable)</p>
B. Professional Skills	Decision Making
	The user/individual on the job needs to know and understand how to: SB1. make decisions on a suitable course of action or response
	Plan and Organize
	The user/individual on the job needs to know and understand: SB2. Plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB8. NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB7. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB8. Identify immediate or temporary solutions to resolve delays SB9. Identify sources of support that can be availed of for problem solving for various kind of problems SB10. Seek appropriate assistance from other sources to resolve problems SB11. Report problems that you cannot resolve to appropriate authority
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB12. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
Critical Thinking	
The user/individual on the job needs to know and understand how to: SB13. apply problem-solving approaches in different situations SB14. refer anomalies to the line manager SB18. Identify any issues affecting the material, equipment or surroundings SB15. Escalate issues that cannot be solved as per the troubleshooting/company manual	

NOS Version Control

NOS Code	RSC / N 0102		
Credits(NSQF)	TBD	Version number	1.0
Industry	Hydrocarbon	Drafted on	02/03/2017
Industry Sub-sector	Upstream	Last reviewed on	02/03/2017
Occupation	Production	Next review date	02/03/2019



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National Occupational Standard



Overview

The Unit is about Work effectively with colleagues and supervisor

Unit Code	HYC/N 0103
Unit Title (Task)	Work effectively with colleagues and supervisor
Description	This unit covers basic etiquette and competencies that a candidate is required to possess and demonstrate in their behavior and interactions with others at the workplace.
Scope	This unit/task covers the following: <ul style="list-style-type: none"> • Work effectively with colleagues and supervisor
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria
Work effectively with colleagues and supervisor	<p>PC1. Accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required</p> <p>PC2. Accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt</p> <p>PC3. Give information to others clearly, at a pace and in a manner that helps them to understand</p> <p>PC4. Display helpful behavior by assisting others in performing tasks in a positive manner, where required and possible</p> <p>PC5. Consult with and assist others to maximize effectiveness and efficiency in carrying out tasks</p> <p>PC6. Display appropriate communication etiquette while working</p> <p>PC7. Display active listening skills while interacting with others at work</p> <p>PC8. Use appropriate tone, pitch and language to convey politeness, assertiveness, care and professionalism</p> <p>PC9. Demonstrate responsible and disciplined behaviors at the workplace</p> <p>PC10. Demonstrate Time Management Skills</p> <p>PC11. Understands Expectation Management</p> <p>PC12. Demonstrate Commitment to work, adhering to SOPs, Honesty etc.</p>
Knowledge and Understanding (K)	
A. Organizational Context (Knowledge of the company / organization and its processes)	The user/individual on the job needs to know and understand: <p>KA1. Legislation, standards, policies, and procedures followed in the company relevant to own employment and performance conditions</p> <p>KA2. Reporting structure, inter-dependent functions, lines and procedures in the work area</p> <p>KA3. Risk and impact of not following defined procedures/work instructions</p> <p>KA4. Escalation matrix for reporting identified incidents, troubles and/or emergencies e.g. system failures, fire and power failures</p>

	<p>KA5. Records to be maintained and implications of non-maintenance of the same</p> <p>KA6. SHE and OHS guidelines and regulations as per company's norms</p>
B. Technical Knowledge	<p>The user/individual on the job needs to know and understand:</p> <p>KB1. The user/individual on the job needs to know and understand:</p> <p>KB2. Various categories of people that one is required to communicate and co-ordinate with in the organization</p> <p>KB3. Importance of effective communication in the workplace</p> <p>KB4. Importance of teamwork in organizational and individual success</p> <p>KB5. Various components of effective communication</p> <p>KB6. Key elements of active listening</p> <p>KB7. Value and importance of active listening and assertive communication</p> <p>KB8. Barriers to effective communication</p> <p>KB9. Importance of tone and pitch in effective communication</p> <p>KB10. Importance of avoiding casual expletives and unpleasant terms while communicating professional circles</p> <p>KB11. How poor communication practices can disturb people, environment and cause problems for the employee, the employer and the customer</p> <p>KB12. Importance of ethics for professional success</p> <p>KB13. Importance of discipline for professional success</p> <p>KB14. What constitutes disciplined behavior for a working professional</p>
Skills (S)	
A. Core Skills/ Generic Skills	Basic Reading & Writing Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA1. Filling up appropriate technical forms, activity logs in required format of the company based on the SOP</p> <p>SA2. Maintain proper records as per given format</p> <p>SA3. Read and understand manuals, work orders, health and safety instructions, memos, reports etc.</p>
	Communication Skills
	<p>The user/ individual on the job needs to know and understand how to:</p> <p>SA4. Courteous to the Peers , Juniors , Superiors and customers</p> <p>SA5. Liaisoning and coordination skills</p>
B. Professional Skills	Decision Making
	<p>The user/individual on the job needs to know and understand how to:</p> <p>SB1. make decisions on a suitable course of action or response</p>
	Plan and Organize
	<p>The user/individual on the job needs to know and understand:</p>

Work effectively with colleagues and supervisor

	SB2. Plan and organize their own work schedule, work area, tools, equipment and materials to maintain decorum and for improved productivity
	Customer Centricity
	The user/individual on the job needs to know and understand how to: SB3. NA
	Problem Solving
	The user/individual on the job needs to know and understand how to: SB4. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB5. Identify immediate or temporary solutions to resolve delays SB6. Identify sources of support that can be availed of for problem solving for various kind of problems SB7. Seek appropriate assistance from other sources to resolve problems SB8. Report problems that you cannot resolve to appropriate authority
	Analytical Thinking
	The user/individual on the job needs to know and understand how to: SB9. Identify defects in the material and communicate it at the earliest and suggest improvements(if any) in process/material based on experience
	Critical Thinking
	The user/individual on the job needs to know and understand how to: SB10. apply problem-solving approaches in different situations SB11. refer anomalies to the line manager SB12. Escalate issues that cannot be solved as per the troubleshooting/company manual

HYC/N 0103

Work effectively with colleagues and supervisor

NOS Version Control

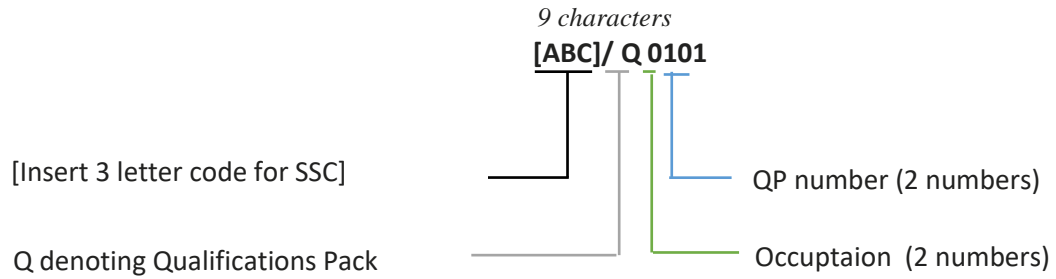
NOS Code	RSC / N 0103		
Credits(NSQF)	TBD	Version number	1.0
Industry	Hydrocarbon	Drafted on	02/03/2017
Industry Sub-sector	Upstream	Last reviewed on	02/03/2017
Occupation	Production	Next review date	02/03/2019



Annexure

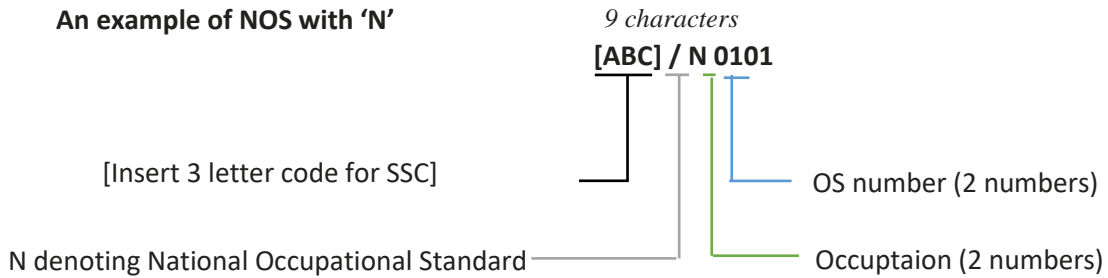
Nomenclature for QP and NOS

Qualifications Pack



Occupational Standard

An example of NOS with 'N'



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CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Assistant Technician- Drilling (Oil & Gas)

Qualification Pack HYC/Q 0101

Sector Skill Council Hydrocarbon Sector Skill Council

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
5. To pass the Qualification Pack , every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
6. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

Compulsory NOS				Marks Allocation	
Total Marks: [100]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
HYC/N 0101 Perform Drilling	PC1. Understanding and knowledge of the types of Oil & Gas Wells	100	5	0	5
	PC2. Understand Platform types for underwater drilling		5	0	5
	PC3. Understand the on shore Well Components		5	0	5
	PC4. Upstream process sections		5	1	4
	PC5. Understanding the Components of Drilling Rig (derrick, floor, drawworks, drive and mud handling, drill string, Drill Collar, Blowout Preventer, turn table, Crown Block, Top drive, Iron Roughneck, Mud Pumps.)		5	1	4
	PC6. Understanding the components of Well		5	1	4
	PC7. Understanding of working at height, operation at monkey board, top man escape device				

Compulsory NOS				Marks Allocation	
Total Marks: [100]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC8. Understanding Wellhead		5	1	4
	PC9. Perform Artificial lift operation		2	1	1
	PC10. Knowledge of the Well workover, intervention and stimulation		2	1	1
	PC11. Understanding Manifolds and gathering		2	1	1
	PC12. Understanding Drilling Methods		5	1	4
	PC13. Understand Abandonment Process		3	1	2
	PC14. Understanding Drilling Operations		5	1	4
	PC15. Understanding Completion, Enhanced Recovery and Workover Operations		3	1	2
	PC16. Understand a Typical Drilling Program		5	3	2
	PC17. Prepare for basic routine maintenance tasks		5	3	2
	PC18. Describe basic routine maintenance techniques		4	2	2
	PC19. Carry out basic routine maintenance tasks		5	4	1
	PC20. Carry out basic inspections		3	1	2
	PC21. Identify the use of basic maintenance hand tools		5	3	2
	PC22. Demonstrate the use of basic hand tools for maintenance tasks and the production of an artifact		5	3	2
	PC23. Demonstrate the care of basic maintenance hand tools		5	2	3
				34	66

Compulsory NOS				Marks Allocation	
Total Marks: [100]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
HYC/N 0102 Occupational health and safety (OHAS)	PC 1 Use protective clothing/equipment for specific tasks like cutting, welding, repairing in pipeline jobs, well operations, maintenance inside the installation and work conditions during day to day work and during emergency.	100	6	3	3
	PC2. State the name and location of people responsible for health and Safety for the workplace and escalation matrix.		5	0	5

Compulsory NOS				Marks Allocation	
Total Marks: [100]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
	PC 3 Identify job-site hazardous work and state possible causes of risk or possible accidents in the workplace.		6	3	3
	PC 4 Carry out safe working practices while dealing with hazards to ensure the safety of self and others state methods of accident prevention in the work environment of the job role.		6	3	3
	PC 5. State location of general health and safety equipment in the workplace.		5	0	5
	PC 6. Inspect for faults		5	3	2
	PC 7 Work safely in and around trenches		5	3	2
	PC8. Identify common risks and safety SOP in Oil & Gas production area		5	1	4
	PC 9. Use the various appropriate fire extinguishers on different types of fires correctly.		5	2	3
	PC 10. Identify and follow pro active and reactive fire fighting SOP in Oil & Gas production facilities		5	3	2
	PC 11. Perform Fire Evacuation Steps		6	3	3
	PC12. Prepare incident Reports		5	3	2
	PC 13. Availability of First Aid box & accessories		5	2	3
	PC 14. Demonstrate how to free a person from electrocution		5	3	2
	PC 15. Administer appropriate first aid to victims where required eg. in case of bleeding, burns, choking, electric shock, poisoning etc.		5	2	3
	PC 16. Administer appropriate first aid in chemical hazard		5	2	3
	PC 17. Perform and organize loss minimization or rescue activity during an accident in real or simulated environments		5	2	3
	PC18. Follow SOP in Oil & Gas production Facilities		5	2	3
	PC 19 Use/Propoer utilization of breathing apparatus		3	1	2
	PC 20 Ensure emergency preparation and resonse		3	1	2
				42	58

Compulsory NOS				Marks Allocation	
Total Marks: [92]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
HYC/N 0103 Work effectively with	PC1. Accurately receive information and instructions from the supervisor and fellow workers, getting clarification where required	92	8	2	6

Compulsory NOS				Marks Allocation	
Total Marks: [92]					
Assessment outcomes	Assessment Criteria for outcomes	Total Marks	Out Of	Theory	Skills Practical
colleagues and supervisor	PC2. Accurately pass on information to authorized persons who require it and within agreed timescale and confirm its receipt		8	2	6
	PC3. Give information to others clearly, at a pace and in a manner that helps them to understand		8	2	6
	PC5. Consult with and assist others to maximize effectiveness and efficiency in carrying out tasks		8	2	6
	PC6. Display appropriate communication etiquette while working		8	2	6
	PC7. Display active listening skills while interacting with others at work		8	2	6
	PC8. Use appropriate tone, pitch and language to convey politeness, assertiveness,		8	2	6
	PC9. Demonstrate responsible and disciplined behaviors at the workplace		8	2	6
	PC10. Demonstrate Time Management Skills		10	2	8
	PC11. Understands Expectation Management		8	2	6
	PC12. Demonstrate Commitment to work, adhering to SOPs, Honesty etc.		10	2	8
				22	70