



IADC KSAs

KNOWLEDGE, SKILLS AND ABILITY

FOR RIG CREWS AND RIG SUPERVISORY PERSONNEL

1 June 2000

Foreword

PURPOSE OF THE KSAs

The IADC Training Committee developed the Knowledge, Skills and Abilities (KSAs) templates to assist the drilling industry in formulating and conducting training courses designed for drilling personnel. The templates represent the basic knowledge, skills and abilities deemed appropriate by the Training Committee, by job position. In addition to the templates provided by job position, a general KSA with respect to Health, Safety and the Environment (HSE) matters, was also developed.

TEMPLATE USAGE

Interested parties are encouraged to utilize the KSAs as the framework for developing and/or evaluating in-house or commercial training programs. An **example HSE KSA** is provided on the following pages. The template is divided into three (3) sections. The **Knowledge** section specifies the subject to be addressed, such as Health, Safety and Environmental Policies and Procedures. The second section, **Skills/Ability**, details the individual skills and abilities necessary for an employee to master the Knowledge in question. The third and final section, **Performance Measurement**, will reflect each party's (drilling contractor or commercial trainer) means of measuring the performance of the employees involved in the training. This section is purposely left blank to allow each party to set their own unique measurements based on their individual training methods, local regulations and company policies and programs. For explanation purposes, the Performance Measurement section on the enclosed example HSE KSA has been completed in very basic terms to provide guidance on the intent and usage of this section. KSA accreditation by the IADC is not expressed or implied.

DISCLAIMER

The KSAs are of a general nature and do not encompass all circumstances, laws or regulations. Information as to health, safety and environmental risks and means of addressing same should be obtained from each individual employer. The IADC makes no representation, warranty or guarantee in connection with the KSAs or their instructions, and hereby expressly disclaims any liability or responsibility for loss or damage of any kind or nature resulting from the use of this publication or its instructions, or for any violation of any law or regulation with which these publications may conflict, address or impact.

**Example KSA
HEALTH, SAFETY AND ENVIRONMENT (HSE)**

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>1. HEALTH AND SAFETY ENVIRONMENTAL POLICIES AND PROCEDURES</p>	<p>EXPLAINS:</p> <ul style="list-style-type: none"> • company health and safety policies and procedures • appropriate actions to be taken to comply with company health and safety policy and procedure • proper waste management procedures <p>MAINTAINS:</p> <ul style="list-style-type: none"> • good housekeeping practices for work area • personnel hygiene in accordance with company policy and procedure <p>ACTIVELY PARTICIPATES IN:</p> <ul style="list-style-type: none"> • all applicable safety meetings 	<ol style="list-style-type: none"> 1. Observed by supervisor to display an adequate knowledge of company policies and procedures. 2. Observed by supervisor to promote good housekeeping and personal hygiene. 3. Has attended and participated in all safety meetings to date.
<p>2. KNOWLEDGE OF SAFETY IN THE WORKPLACE</p>	<p>UNDERSTANDS AND EXPLAINS:</p> <ul style="list-style-type: none"> • company health and safety policies and procedures • company permit procedures • proper reporting procedures for HSE incidents • company requirements for working at heights • company requirements for working over water <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • potential hazards in the workplace <p>ACTIVELY PARTICIPATES IN:</p> <ul style="list-style-type: none"> • safety meetings 	<ol style="list-style-type: none"> 1. Observed by supervisor to understand and explain company policies for safety at the workplace. 2. Observed by supervisor to be able to understand and identify workplace hazards. 3. Has attended and participated in all safety meetings to date.

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>3. KNOWLEDGE OF PROPER USE OF PERSONNEL PROTECTIVE EQUIPMENT</p>	<p>DEMONSTRATES PROPER USE OF THE FOLLOWING:</p> <ol style="list-style-type: none"> 1. Hardhats 2. Safety glasses 3. Footwear 4. Clothing 5. Aprons 6. Face Shields 7. Goggles 8. Gloves 9. Respirators 10. Hearing protection 11. Fall protection/restraining devices 12. Personnel floatation devices 13. Skin protection 	<ol style="list-style-type: none"> 1. Observed by supervisor to have adequate knowledge of all required PPE and how and when to use it.
<p>4. SAFE USE, CARE AND DISPOSAL OF POTENTIALLY HAZARDOUS SUBSTANCES</p>	<p>UNDERSTANDS AND FOLLOWS:</p> <ul style="list-style-type: none"> • safe work procedures while handling and/or working with chemicals <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • appropriate actions to be taken in the event of exposure and/or contact with a potentially hazardous substance <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • proper storage locations for potentially hazardous substances 	<ol style="list-style-type: none"> 1. Observed by supervisor to display understanding of proper procedures for handling chemicals. 2. Observed by supervisor following proper procedures handling chemicals. Observed by supervisor to understand and demonstrate proper knowledge of actions to be taken. 3. Has identified how and where to store/dispose of hazardous substances.

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>5. SAFE MATERIAL HANDLING</p>	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper lifting techniques while moving materials <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • hazards associated with manual lifting • device or equipment which can be used to assist with material handling • other potential hazards associated with material handling <p>EXPLAINS:</p> <ul style="list-style-type: none"> • appropriate company policies and procedures regarding the manual handling of materials 	<ol style="list-style-type: none"> 1. Observed by supervisor to properly demonstrate lifting techniques. 2. Observed by supervisor to be able to identify hazards and equipment associated with equipment handling. 3. Displays adequate knowledge of company policies and procedures associated with material handling.
<p>6. EMERGENCY RESPONSIBILITIES</p>	<p>UNDERSTANDS AND EXPLAINS:</p> <ul style="list-style-type: none"> • personal responsibilities as identified on station bill • proper use of emergency equipment • alarm signals and actions to be taken in response • other emergency alarms and responses, i.e. man overboard <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • locations of emergency equipment in the working area • location of alarm actuators 	<ol style="list-style-type: none"> 1. Observed by supervisor to understand and explain his responsibilities in an emergency and the equipment to be used. 2. Observed by supervisor to know where emergency equipment is and how to activate alarms.

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>7. COMPETENT FIRE WATCH</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • fire triangle • types and sizes of fire extinguishers found on drilling rigs and their applications • roles of a fire watcher, e.g. fire protection, protect welder, etc. • how to prepare an area for 'hot work' <p>DESCRIBES:</p> <ul style="list-style-type: none"> • responsibilities during fire work • responsibilities of a fire watcher at the conclusion of 'hot work' activity <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • how to use a fire extinguisher 	<ol style="list-style-type: none"> 1. Observed by supervisor to have shown adequate knowledge of extinguishers, his duties as fire watch and preparation for hot work. 2. Satisfactorily describes fire watch. 3. Observed by supervisor properly using a fire extinguisher.
<p>8. HOUSEKEEPING AND ORGANIZATION</p>	<p>EXPLAINS:</p> <ul style="list-style-type: none"> • importance of good housekeeping <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • advantages of good housekeeping <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper storage of tools, materials and equipment to maintain proper housekeeping • proper disposal of trash, rags, scrap, used oil, solvents and thinners and any other material specific to your job - Specify: _____ 	<ol style="list-style-type: none"> 1. Observed by supervisor adequately explaining and identifying significance of good housekeeping. 2. Able to demonstrate to supervisor proper storage and disposal of materials and tools.

Table of Contents

Foreword	2
Example KSA.....	3
Table of Contents	7
BASIC ROUSTABOUT.....	8
BASIC FLOORMAN	11
BASIC DERRICKMAN.....	16
BASIC CRANE OPERATOR.....	23
BASIC MOTORMAN	30
BASIC MECHANIC	33
BASIC ELECTRICIAN	48
DRILLER AND ASSISTANT DRILLER	55
TOOLPUSHER.....	60
OFFSHORE INSTALLATION MANAGER (OIM)	64
HEALTH, SAFETY AND ENVIRONMENT (HSE).....	70

BASIC ROUSTABOUT

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. LOAD AND OFFLOAD BOATS	UNDERSTANDS: <ul style="list-style-type: none"> • the Captain of the vessel is in complete charge of his/her vessel, and shall give appropriate orders as to the safety of the vessel, its crew and cargo • hazards of the movement of equipment and how adverse wind, waves and weather affect overall operations 	
	UNDERSTANDS AND CAN EXPLAIN: <ul style="list-style-type: none"> • correct selection, inspection and use of slings, containers, hoses and baskets 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • work on the boat (EXAMPLE: hook and unhook crane lifts safely; work as a team member) 	
2. CRANE OPERATIONS	UNDERSTANDS: <ul style="list-style-type: none"> • functions of the crane • safe working loads and proper use of lifting equipment • requirements to utilize fall protection equipment while working at heights on crane • safe use of personnel baskets, workbaskets or other equipment used to move personnel • inspection, lubrication and replacement of wire rope 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • handle inspection and rigging of loads using slings, tag lines, chains, shackles, lift caps, hooks, chain binders, etc. • understand hand and verbal signals • perform preventative maintenance of crane as required 	

BASIC ROUSTABOUT, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
3. MAINTAIN AND HANDLE TUBULAR GOODS	UNDERSTANDS: <ul style="list-style-type: none"> • proper use of brushes, rabbits, thread protectors, pipe dope, etc. 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • bundle and move tubular goods from place to place • rack tubulars on pipe rack • assist in measuring tubulars • install stop collars and centralizers on casing 	
4. ASSIST IN HANDLING AND MIXING MUD/CHEMICALS	UNDERSTANDS AND CAN EXPLAIN: <ul style="list-style-type: none"> • proper selection and use of PPE 	
	DEMONSTRATES: <ul style="list-style-type: none"> • correct knowledge and use of chemical / barite hoppers • proper disposal of debris (EXAMPLE: empty sacks and buckets) • proper lifting techniques 	
5. ASSIST IN ASSEMBLY, DISMANTLING, MAINTENANCE AND LUBRICATION OF DECK MACHINERY AND OTHER EQUIPMENT	UNDERSTANDS <ul style="list-style-type: none"> • importance of reporting equipment defects 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • correctly use hand and power tools • perform pre-use inspection of tools and equipment 	

BASIC ROUSTABOUT, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>6. PAINTING</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • different types of paint, curing agents and related equipment 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • properly prepare surfaces for painting using power tools (EXAMPLE: scrapers, needle guns and sand blasters) • safely use and care for paint locker equipment • select and use of PPE properly 	
<p>7. RELIEVE FLOORMEN</p>	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • basic knowledge of drill floor operations • basic knowledge of functions of drill floor equipment • safe use of drilling equipment • understanding of drill floor emergency procedures 	

BASIC FLOORMAN

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. DUTIES OF ROUSTABOUT	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge, skills and abilities for the position of Roustabout 	
2. WORK ON RIG FLOOR	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • successfully handle tubulars (drill pipe, casing, tubing, etc.), to make and break tubular connections using slips (while utilizing proper lifting techniques), top drive, rig tongs and related equipment • make up and break out stands and rack in derrick, while tripping pipe, using air hoist, rig tongs, chain tongs, pipe spinners, iron roughneck, mouse hole, collar clamp, etc. • properly handle and use subs, lift subs, lift caps and other threaded tubular equipment • safely tail, stab, rack back and otherwise handle drill string, casing, tubing, etc. • properly rig-up and use of rig floor equipment (air hoists, mouse hole, inner and outer rotary bushings, mud bucket, casing equipment, diverter, etc.) • properly maintain correct count of pipe in or out of the hole • coordinate well with Driller, Crane Operator and other crewmembers • adequately apply safety precautions while testing, logging, etc. (all required PPE, etc.) • properly line up and bleed down pressure from lines, valves, equipment, etc. 	

BASIC FLOORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>3. ROUTINE MAINTENANCE ON RIG FLOOR</p>	<p>UNDERSTANDS :</p> <ul style="list-style-type: none"> • routine maintenance and minor repair of pipe spinners, iron roughneck, rig tongs, chain tongs, pipe slips, collar clamp, pipe elevators, etc. • need to dope and protect tubular connection box and pin threads with thread protectors and use proper handling techniques • routine maintenance procedures, i.e. slip and cut drill line <hr/> <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • apply the proper amount of grease to grease fittings and other lubrication points on the draw works, top drive, traveling block, crown block, compensators, swivel, hook, chicksans, low-torque valves, standpipe valves, drill line anchor, air hoists, rotary locks, Halliburton wire-line unit, etc. • inspect and maintain tubular box and pin connections, dies, nuts, bolts, etc. on drilling equipment for wear and/or damage • check the torque on derrick bolts/nuts while utilizing proper PPE • perform simple maintenance on hand and power tools • maintain wire ropes and cables 	
<p>4. MAINTAIN AND HANDLE TUBULAR GOODS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • properly use brushes, rabbits, thread protectors and pipe dope, etc. • bundle and move tubular goods from one place to another • rack tubulars on pipe rack • assist in measuring tubulars • install stop collars and centralizers on casing 	

BASIC FLOORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
5. WORK IN SHAKER HOUSE	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to inform Driller of changes in mud weights, changes in amount of flow of mud across shakers, etc. 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • take mud samples, weigh mud and take viscosity readings • maintain log of mud weights, times, etc. • adjust flow of mud evenly across shaker screens • operate machinery, valves and controls properly • properly operate shaker house equipment • use approved procedures to maintain, repair and adjust equipment • assist Derrickman in mixing and handling of mud and chemicals while adhering to all safety policies, procedures, etc. 	
6. ASSIST IN HANDLING AND MIXING MUD/CHEMICALS	UNDERSTANDS : <ul style="list-style-type: none"> • proper selection and use of PPE 	
	DEMONSTRATES: <ul style="list-style-type: none"> • correct knowledge and use of mixing/ barite hoppers • understanding of special precautions and utilizing special procedures for mixing hazardous chemicals, i.e. caustic, etc. • proper disposal of debris, for example, empty sacks and buckets • proper lifting techniques 	

BASIC FLOORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
7. MONITOR HOLE FOR ADEQUATE FILL	UNDERSTANDS : <ul style="list-style-type: none"> • importance of informing Driller of any abnormal fluid fill and or returns 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • line-up trip tank, fill it and circulate mud/fluid over the hole properly • properly calculate and verify correct fluid fill and returns when pipe is run in or pulled out of hole 	
8. BLOWOUT PREVENTION	UNDERSTANDS: <ul style="list-style-type: none"> • what is necessary to assist and/or perform <u>with supervision</u>, maintenance and simple repairs on the BOP equipment 	
	DEMONSTRATES : <ul style="list-style-type: none"> • knowledge of well control emergencies and assigned duties, including a general overview of well control procedures • adequate understanding of BOP ram configurations • understanding of consequences of using blind/shear rams • understanding of trip/pit drills, responsibilities • understanding of nipping up and nipping down the BOPs, diverter, wing valves, etc. while utilizing the proper PPE 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • use and install the necessary equipment • change the rams 	

BASIC FLOORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>9. CASING OPERATIONS</p>	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • understanding of the correct procedures for handling casing and related equipment • understanding of the precautions and correct use of hand slips, tailing rope, elevators, spiders, thread locking compounds, stop collars, centralizers, etc • understanding of the precautions and the correct use of the casing stabbing board and related PPE • understanding of the precautions related to working around the cement unit, handling cement lines, working with equipment that is under pressure, etc. 	
<p>10. RELIEVE THE DERRICKMAN</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • use the correct procedures for the approach to and from the monkey board, while utilizing the proper PPE • properly function and work from the monkey board (tripping pipe, making connections, racking BHAs, etc.) • use the appropriate procedures when working in the derrick, pump room, chemical room, pit room, p-tank room, bulk air compressor room, etc. 	

BASIC DERRICKMAN

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. DUTIES OF ROUSTABOUT	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge, skills and abilities for the position of Roustabout 	
2. DUTIES OF FLOORMAN	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge, skills and abilities for the position of Floorman 	
3. MONITOR HIGH-PRESSURE MUD PUMPS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • make a visual inspection and/or listen to the fluid end of the pump while it is running and recognize potential problems • check and maintain liner cooling/lubricating system • check and set pop-off valve • verify that suction and discharge dampeners are charged and functioning properly • properly line-up, bleed-down, etc. pressurized lines, valves, etc. • perform preventative maintenance as required • verify that all equipment guards are in place • verify that all required studs/nuts are in place and properly torqued 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
4 MAINTENANCE AND REPAIR OF HIGH-PRESSURE MUD PUMPS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • verify that pony rod, intermediate rod, swab rod, etc. are checked for proper torque at the proper intervals • check the oil level in the gear end of the mud pump and to ensure that the oil lubricating system is working properly • verify expendable fluid end parts are in working condition and replaced as needed • maintain an adequate inventory of spare parts • verify that preventative maintenance is being performed as required 	
5. OPERATION, MAINTENANCE AND REPAIR OF MUD MIXING PUMPS AND CHARGING PUMPS AND RELATED EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • properly line up all valves prior to use • verify that preventative maintenance is being performed as required • check for leaks and abnormal conditions • knowledge of need to lubricate equipment as required - UNDERSTANDS? • replace pump packing as required • operate, maintain, clean and inspect barite and chemical hoppers 	
6. VALVES ASSOCIATED WITH MUD SYSTEM	UNDERSTANDS: <ul style="list-style-type: none"> • the need to clean and lubricate valves as required 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • open and close valves for desired position/function • perform preventative maintenance and replace defective parts in valves as required 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>7. MUD PITS</p>	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • understanding of and compliance with company policies involved with working in pits • knowledge of valve alignment in pits to provide desired usage of pits and associated equipment 	
<p>8. TRIPPING PIPE</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • proper use of hand signals when communicating with personnel on drill floor • required monkey board equipment and the need to check same prior to use (belly belt, belly belt rope, pull-back rope, pipe fingers, drill collar air hoist, etc.) • running the drill collar air hoist to handle pipe in derrick <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • check that fluid transfers from desired pit to trip tank are correctly lined up before filling trip tank • fill trip tank and to put it on line, circulating mud over the hole • check fluid returns are properly lined up from the hole to the trip tank and on to the desired pit prior to tripping back in the hole • prepare stand for racking, release pipe from elevators, rack in desired pipe finger and secure when pulling stands out of the hole • prepare stand to be run, latch pipe in elevators and tail stand as the floormen stab the stand prior to making it up, when running stands in the hole 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>9. MAINTENANCE OF DERRICK AND RELATED EQUIPMENT</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • inspect safety lines, ropes, air hoists, monkey board, derrick fingers, tubing and stabbing boards, sheaves, crown block, derrick bolts, pins, welds, and other lines and equipment in or attached to the derrick while utilizing the proper fall protection, PPE, etc. • lubricate air hoists, sheaves and fast line guide • perform general repairs or replace defective parts • assist in major repairs and maintenance of equipment 	
<p>10. MIXING OF DRILLING FLUIDS AND CHEMICALS</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • use of proper safety procedures and equipment for mixing and handling chemicals 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • arrange mud materials and chemicals in chemical room for safe and efficient use • operate forklift • use appropriate mixing procedures (including caustic and other hazardous chemicals) 	
<p>11. MONITOR MUD, MUD PROPERTIES AND PERFORM CALCULATIONS</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • requirement to report any changes in pit volumes to the Driller • need for good communications with the mud logger and mud engineer 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • weigh mud and check viscosity • calculate pit volumes • monitor returns from shaker house 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
12. MAINTAIN LOGS AND RECORDS	UNDERSTANDS: <ul style="list-style-type: none"> • need to maintain minimum required levels of mud materials, i.e. barite 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • maintain daily (tourly) log of drilling fluid properties • maintain daily (tourly) log of drilling chemicals and mud materials usage 	
13. RECOGNIZE WARNING SIGNS OF KICKS	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to monitor and report pit level changes • requirement to monitor and report changes in mud properties 	
14. PREPARE FOR DRILLING OPERATIONS	UNDERSTANDS: <ul style="list-style-type: none"> • need to watch for and report returns to the Driller 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • prepare necessary equipment for use (open required valves, ensure all other valves are closed, check precharge pressures, ensure equipment is not isolated, etc.) • assign required equipment (charging pumps, liner-cooling pumps, pit agitators, etc.) 	
15. BLOWOUT PREVENTION	DEMONSTRATES : <ul style="list-style-type: none"> • understanding of the purposes of blowout prevention equipment • understanding of the operation of blowout prevention equipment • operation of the blowout preventers 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • assist in nipping up and down blowout prevention equipment • assist in maintenance and repair of blowout prevention equipment 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>16. CASING OPERATIONS</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • communication with the casing crew is essential • rigging-up and functioning testing the casing stabbing board • use of all required personal protective equipment and ensures that it is available 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • stab casing from casing stabbing board and assist in lining up threads when required • line up valves and fluid system for casing fill-up • mix chemicals, spacers, etc. for cementers and line up pumps, etc., to cement unit • line up fluid system for displacement of cement • monitor returns and report to Driller 	
<p>17. EFFECTIVE SUPERVISION</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • requirement to advise supervisor of current conditions and of any recent changes in conditions 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • perform as Driller as and when required • act as lead hand when working on the rig floor • supervise personnel per Driller instructions • train drill crew • preplan work to be performed by rig personnel • utilize effective hand-over procedures with relief 	

BASIC DERRICKMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
18. WORKING WITH THIRD PARTY PERSONNEL AND EQUIPMENT	UNDERSTANDS: <ul style="list-style-type: none">• third party personnel are in charge of their operations and that we may assist them at their specific direction, after consultation with and approval by the Senior Toolpusher or O.I.M.	

BASIC CRANE OPERATOR

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. DUTIES OF ROUSTABOUT	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge, skills and abilities for the position of Roustabout 	
2. SLINGING AND/OR LIFTING EQUIPMENT	UNDERSTANDS: <ul style="list-style-type: none"> • proper knowledge of sling configurations that are not safe to be used and are not recommended by sling manufacturers, etc. • method for maintaining crane cable/wire rope replacement dates 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • determine weight of loads and center of gravity • select correct slings or other lifting devices as determined by size, weight and configuration • use proper methods of slinging loads • determine the safe working loads of various slings in various configurations • keep running inventory of all slings and crane lifting equipment 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
3. CRANE OPERATION	UNDERSTANDS: <ul style="list-style-type: none"> • required policies and procedures when helicopter is in the area (landing and/or taking off) 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • carry out pre-start checks • perform proper start up procedures • perform pre-operation checks • adjust boom angle to meet crane-rating curves • center to raise and lower hook, boom in and boom out and swing left and swing right while maintaining load vertically • make static lifts • make dynamic lifts • allow for heave of workboat when slacking off or picking up load • designate one person to give correct hand signals and respond appropriately to those hand signals when in visual contact with load and when carrying out lifts when unable to see load • use various knots appropriate for marine application • identify potential conflicting activities and/or obstructions when operating crane 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>4. MAINTENANCE OF CRANE AND ASSOCIATED EQUIPMENT</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • inspect the crane boom, sheaves, wire rope, fluid levels, block, cable drums, pedestal, etc. • change oil, as applicable • properly lubricate crane, including boom, pins, swing bearing, sheaves, dogs, wire rope, etc. • inspect control handles for proper centering • change out crane cables and restring blocks and boom lines when necessary • inspect and set protective devices • perform preventative maintenance system and maintain log of maintenance and repairs, as applicable per the crane manual 	
<p>5. LIFTING AND MOVING TUBULAR GOODS AND OTHER EQUIPMENT</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • move equipment to catwalk or drill floor as required • move casing to catwalk in proper sequence • check that deck personnel properly handle lifts and loads and follow the correct procedures, i.e. tag lines, escape routes, etc. • assist the drill crew with providing equipment and lifts as required 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>6. ASSIST DURING RIG MOVES</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • designate roustabouts for doping legs during jacking operations • organize roustabouts for lubricating jacking gearboxes while underway • organize installation of jetting tubes if required for next location • organize roustabouts for preparing for and assisting with jetting operations, if required • organize roustabouts for checking fluid levels in tanks and checking draft readings while afloat and reporting to person in charge (PIC) 	
<p>7. WORKING SUPPLY BOATS</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • requirement to advise supervisor when working the supply boat is completed <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • establish what is to be backloaded and determine proper sequence of backloading • organize material to be backloaded on deck in order to leave room for offloading materials from the boat • use proper safety equipment and procedures • pass mooring lines to boat • pass the fuel, water and bulk hoses to boat • inspect and replace mooring lines, bulk fill lines and consumable lines • place offloaded materials in proper place on rig 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
8. LIFTING PERSONNEL	UNDERSTANDS: <ul style="list-style-type: none"> • need to use a positive latching device on the crane hook • need to raise and lower personnel over the water rather than over the boat or dock • need to raise and lower personnel in a safe manner 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • inspect personnel lifting device prior to use • use safe policies and procedures while lifting personnel (do not overload lifting device, wearing proper PPE, positions of personnel, etc.) 	
9. ORGANIZATION	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • place loads in appropriate locations on deck • organize equipment and materials to provide adequate working areas on deck • store sack and other materials and supplies with consideration to frequency of usage • organize tubular goods according to type, grade, expected sequence of usage, etc. 	
10. HOUSEKEEPING	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to ensure that decks are kept clean of oil, grease, spills, etc. • responsibility to report any damaged or worn items to supervisor in order to ensure repair 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • store, clean and protect tools and equipment • store and maintain slings, shackles and other equipment 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
11. ENVIRONMENTAL PROTECTION	UNDERSTANDS: <ul style="list-style-type: none"> • importance of encouraging personnel to observe water around rig for pollutants 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • operate and maintain skimmer tank • clean and maintain drains 	
12. THIRD PARTY PERSONNEL AND EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • place and arrange equipment and tools for third party companies/personnel (under third party supervision) • assist third party personnel in rig up and rig down of their tools and equipment (under third party supervision) 	
13. HELICOPTER OPERATIONS	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to adhere to company safety policies and procedures while working on or around the heliport and/or helicopters 	
14. ORGANIZE/PLAN WORK OF CREW	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • set priorities for the work • keep the rig floor supplied with all required equipment • assist other departments as required • obtain work permits and prepare risk assessment as required 	

BASIC CRANE OPERATOR, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
15. COMMUNICATIONS	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • keep supervisor informed of progress of assigned tasks and current conditions • advise relief of present operations and assigned work program and projects • prepare hand-over notes for supervisor and relief • properly use radios and other communication equipment 	
16. SUPERVISION	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • responsibility to continue to supervise roustabouts even though they are assigned to assist other departments and personnel <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • train roustabouts to use correct hand signals, proper slinging, material handling, rigging, etc. • train roustabouts in general rig knowledge and safety • verify that safe practices and procedures are followed • be able to evaluate roustabouts for possible promotion and further training • direct roustabout duties and assign tasks 	
	<p>POSSESSES:</p> <ul style="list-style-type: none"> • supervisory and training skills as deemed appropriate by company 	

BASIC MOTORMAN

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. ENGINES AND GENERATORS	UNDERSTANDS: <ul style="list-style-type: none"> • need to inform Mechanic of any mechanical discrepancies 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • properly check operating parameters, i.e. pressures, temperatures, etc. as defined by Mechanic • lubricate machinery • perform routine maintenance as required • maintain Motorman's daily logs • properly isolate breakers 	
2. CONSUMABLES	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to report soundings of tanks to Barge Engineer and any other required personnel 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • assist with bulk materials being transferred to and from supply vessels • take and record tank soundings as required 	

BASIC MOTORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
3. AUXILIARY EQUIPMENT	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to routinely check on auxiliary equipment (air compressors, pumps, fuel centrifuges, sewage treatment system, oil/water separator, valves, heat exchangers, etc.) and when inspections should be made • need to inform Mechanic of any mechanical discrepancies • requirement that all equipment guards must remain in place while equipment is operating • requirement that equipment is to be taken out of service and properly isolated prior to the removal of any guards or other protective devices 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform routine maintenance as required • line up and operate fire pumps and other emergency equipment 	
4. MATERIALS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • properly store, rotate and handle materials (oils, greases, hazardous materials, etc.) • determine which type and viscosity of oil to use in various types of equipment • determine which type of grease to use in various types of equipment 	
5. HAND AND POWER TOOLS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • correctly use, maintain, store and repair hand and power tools 	

BASIC MOTORMAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>6. RIGGING, SLINGING AND LIFTING</p>	<p>RECOGNIZES:</p> <ul style="list-style-type: none"> • rigging, slinging and lifting that is not safe to be used and is not accepted company practice 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • select correct slings or other lifting devices as determined by size, weight and configuration • use proper methods of rigging/slinging/lifting loads 	
<p>7. COMMUNICATIONS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • keep supervisor informed of progress of assigned tasks and current conditions • advise relief of present operations and assigned work program and projects • prepare hand-over notes for supervisor and relief • effectively utilize communications equipment 	

BASIC MECHANIC

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. DUTIES OF MOTORMAN	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge, skills and abilities for the position of a motorman 	
2. MECHANICAL TRAINING & EVALUATION	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • ensure that personnel are aware of and adhere to all regulatory requirements and company policies • instruct personnel on proper work procedures and techniques • identify personnel that demonstrate potential and/or willingness to be trained • determine which training different personnel need in order to progress • supply feedback to personnel on work performance 	
	DEMONSTRATES WILLINGNESS TO: <ul style="list-style-type: none"> • assign the more experienced personnel to instruct the less experienced personnel 	
3. PLANNING WORK ACTIVITIES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • identify and set priorities for the work • direct and coordinate crewmembers in performing the work • verify that appropriate tools and equipment are available and in working order at the appropriate time • prepare required work permits and risk assessments 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
4. COMMUNICATION	UNDERSTANDS: <ul style="list-style-type: none"> • importance of advising supervisor of current and/or changing conditions 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • schedule equipment maintenance and/or repair with other departments (Driller, Drill Crew, Electrician, Third Party, Crane Operator, Deck Crew, Barge Engineer, etc.) • coordinate drills and periodic testing of equipment • plan and coordinate with other departments prior to any major activity such as rig moves, regulatory inspections, etc. • adequately prepare hand-over notes for relief 	
5. INVENTORY	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • determine and verify adequate supplies of spare parts • requisition additional parts and/or supplies to maintain adequate inventory • verify that rotation of spare parts for use is being accomplished 	
6. RECORDS & LOGS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • ensure maintenance of planned and preventative maintenance records and logs • ensure maintenance of engine room, thruster, lock-out/tag-out, etc. records and logs • ensure maintenance of all other maintenance records and logs 	
7. BLUE PRINTS & SCHEMATICS	DEMONSTRATES: <ul style="list-style-type: none"> • aptitude for reading and interpreting drawings and schematics • good working knowledge of the correct modification guidelines and procedures to be used 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
8. TECHNICAL MANUALS & REFERENCES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • locate and produce appropriate source material • collate information and associated sources • use and understand indices and reference sources to find information regarding parts, repairs and/or operational procedures 	
9. USE OF TOOLS & TEST EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • gather data from instruments, logs, and other sources • interpret and use results • properly select and safely use correct tools and test equipment • verify that test equipment is calibrated and in proper working order 	
10. PROPER UTILIZATION OF EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • understand manufacturer recommendations and operating guidelines in order to understand capabilities of equipment • evaluate equipment performance • monitor usage of equipment • interpret and collate equipment usage and performance data • select equipment to be used based on requirements and rotational needs of equipment 	
11. THIRD PARTY EQUIPMENT	DEMONSTRATES: <ul style="list-style-type: none"> • basic knowledge of maintenance and repair of routine third party equipment (pumps, motors, electrical, hydraulic and pneumatic systems, etc.) under their direction 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
12. IDENTIFY AND RESPOND TO ABNORMAL OPERATING CONDITIONS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • interpret past and present performance and other data using accumulated experience 	
	DEMONSTRATES: <ul style="list-style-type: none"> • aptitude for diagnostic capabilities 	
13. PRIME MOVERS/MAIN ENGINES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform pre-start check • ensure that all proper start-up and warm-up procedures are being followed • select engines, put them on the line and ensure efficient load sharing • correctly monitor and perform checks on engines as required when on the line • troubleshoot, service, maintain and repair engines • perform all required preventative maintenance, including top jobs, major overhauls, etc. 	
14. LOAD CELLS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • maintain and repair load cells (change diaphragms, charge with fluid, bleed air from system, etc.) 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>15. HYDRAULIC & PNEUMATIC SYSTEMS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • visually check for leaks in system • lubricate mechanical components • monitor gauges and valves for leaks and/or abnormal readings • calibrate system • troubleshoot, service, maintain and repair system • perform all required preventative maintenance 	
<p>16. IDENTIFY AND RESPOND TO ABNORMAL OPERATING CONDITIONS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • interpret past and present performance and other data using accumulated experience 	
	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • aptitude for diagnostic capabilities 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>17. AIR SYSTEMS: AIR COMPRESSORS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • verify proper starting procedures are followed • select/determine lead compressor • monitor for abnormal pressures, noises, vibrations, heat and/or other malfunction indicators • maintain record of running time, stage pressure, etc. • monitor compressor sequence and unloader panel • show that lube system is maintained and serviced at required intervals • perform maintenance inspection and verify proper operation • repair and/or replace defective parts as necessary • perform all required preventative maintenance 	
<p>18. AIR SYSTEMS: HEAT EXCHANGERS AND AIR DRYERS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • check heat exchanger gauges and perform visual inspection of cores • check air dryer inlet and outlet for temperature differential • maintain air dryer and refrigeration system freon levels • keep cores free of foreign material and to replace zinc anodes as required • perform preventative maintenance or repairs as may be required 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
19. AIR SYSTEM: REGULATORS AND VALVES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • check integrity of air system • repair or replace air regulators, gate valves, check valves, etc. 	
20. AIR SYSTEM: AIR PURGE SYSTEMS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • repair and maintain system • carry out planned and preventative maintenance and set parameters of operation 	
21. DRILLING EQUIPMENT: DRAW WORKS AND ASSOCIATED EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • repair/replace defective and/or worn parts • inspect chain sprockets, chains, gears, diaphragms, etc. • inspect catheads, check engagement of clutches for leaking diaphragms, etc. • inspect pins and bushings on brake band yoke or disc brake mechanisms to ensure good state of repair for draw works braking ability 	
22. DRILLING EQUIPMENT: ROTARY TABLE AND ASSOCIATED COMPONENTS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • check backlash and inspect necessary components • repair/replace defective and/or worn parts • inspect rotary drive chain and coupling • verify proper lubrication of system • perform correct rotary brake adjustments • perform preventative maintenance as required 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
23. DRILLING EQUIPMENT: AUXILIARY DRAW-WORKS BRAKE	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • replace bearings as required • inspect shifter shoe for wear 	
24. DRILLING EQUIPMENT: PNEUMATIC HOISTING AND HANDLING EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • inspect, repair and/or replace defective and/or worn parts on pneumatic motors • replace pressure and/or drive rollers on pipe spinners • perform all required preventative maintenance 	
25. DRILLING EQUIPMENT: HYDRAULIC HANDLING SYSTEMS AND TONGS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • inspect hydraulic components and change oil and filters as required • troubleshoot and repair hydraulic and mechanical systems as required 	
26. DRILLING EQUIPMENT: SWIVEL	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • perform scheduled preventative maintenance and document same • replace bushings, bearings, seals, oil, etc. • repair, rebuild and replace swivel packing as required 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>27. DRILLING EQUIPMENT: TOP DRIVE</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • pick up and lay down top drive • replace the electric motor properly • troubleshoot, service, maintain and repair top drive • perform all required preventative maintenance 	
<p>28. DRILLING EQUIPMENT: GENERAL</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • assist drill crew with troubleshooting, servicing, maintenance and repair of all other drilling equipment 	
<p>29. WATER SYSTEMS: WATER MAKER</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • operate water maker as needed • monitor temperatures, pressures, salinity of water and other required functions to provide proper operation of unit • ensure that system is kept properly cleaned • verify chemical balances and requirements are maintained • verify lube system is maintained • ensure unit and associated equipment is kept free of leaks • repair or replace defective parts as required • perform all required preventative maintenance 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
30. WATER SYSTEMS: FRESH WATER SYSTEM	UNDERSTANDS: <ul style="list-style-type: none"> • importance of knowledge of motor amps required to operate pump's motors 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • pull, repair and/or replace pumps, motors, wiring, etc. on potable water, drill water as well as deep well systems • calculate correct operating pressures of deep well pumps depending upon air gap, GPM required, friction loss, etc. 	
31. WATER SYSTEMS: HOT WATER BOILER SYSTEM & CIRCULATING PUMPS	UNDERSTANDS: <ul style="list-style-type: none"> • importance of alternating usage of pumps and boilers 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • monitor fluid levels • monitor stack temperatures • monitor water temperatures • verify clean fuel supply • verify proper chemical concentration in fluid circulating system, i.e. inhibitor, etc. • monitor suction and discharge pressure on circulating pump • maintain firebox and tubes, i.e. remove soot, etc. • clean fuel nozzles, set electrode gaps and perform all other required preventative maintenance 	
33. WATER SYSTEMS: BRAKE COOLING SYSTEM	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • monitor correct level of rust and bacteria inhibitor in cooling water • check alignment, amperage, base bolts and all other required preventative maintenance 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>34. WATER SYSTEMS: SALT WATER SERVICE AND ENGINE COOLING SYSTEM</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • operate, maintain and monitor centrifugal pumps • monitor and adjust back-pressure valve • verify heat exchangers are being maintained; inspect for leaks and restrictions • verify sufficient salt water supply to sanitation system, water makers, and fire pumps, mud pumps, cement unit, etc. 	
<p>35. WATER SYSTEMS: SANITATION SYSTEM</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • troubleshoot, repair and maintain pump as required • verify correct pressure adjustments • perform all required preventative maintenance 	
<p>36. MUD CIRCULATION SYSTEM: MUD PUMPS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • verify that oil and oil filters are changed at appropriate intervals • verify required crosshead clearance • check vertical and horizontal run-out of pony rods • verify alignment of fluid end block, electric motors, etc. • check, adjust and/or replace drive belts, chains, etc. • troubleshoot, repair and maintain mud pump as required • perform all required preventative maintenance 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
37. MUD CIRCULATION SYSTEM: CENTRIFUGAL PUMPS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • check and verify alignments of components, i.e. coupling, etc. • determine abnormal operating conditions, i.e. noise a, vibration, etc. • troubleshoot, repair and maintain pumps as required 	
38. MUD CIRCULATION SYSTEM: MUD CONDITIONING EQUIPMENT IN THE SHAKER HOUSE	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • repair/replace bearings, sheaves, counter weights, motors, etc. on shale shakers, pumps, desander, desilter, etc. • verify and set proper belt tension on shakers, degasser, etc. • perform service and repairs on degasser, i.e. vacuum pumps, a/c components, valves, etc. • perform service and repairs to mud agitator equipment • perform all required preventative maintenance 	
39. MUD CIRCULATION SYSTEM: MONITORING SYSTEMS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • maintain and repair liquid, bulk and mud monitoring equipment • perform all required preventative maintenance on monitoring systems • properly set and maintain parameters of operation within manufacturer recommendations 	
40. MUD CIRCULATION SYSTEM: CONTROL SYSTEMS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • maintain and repair mud pump (and cement unit) control systems • perform all required preventative maintenance on control systems • properly set and maintain parameters of operation within manufacturer recommendations 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
41. CRANES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • visually inspect swing bearings, bearing races, crane boom, main block, brakes, electrical components, wiring, pneumatic and hydraulic components and lines, and all other required mechanical, electrical, pneumatic and hydraulic components for cracks, leaks, excessive wear, adjustment, working order, etc. • calibrate gauges and instruments • verify lubrication is being done as required • properly set and maintain parameters of operation within manufacturer recommendations • perform all required preventative maintenance 	
42. JACKING SYSTEM	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • verify that lubrication is carried out as required • equalize and set jacking motor torque as required • perform necessary maintenance and repairs to jacking system, i.e. repair/replace bull gears, motors and related equipment, gear boxes, pinions, etc. • perform all required preventative maintenance 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
43. LIFE RAFTS, CAPSULES, LIFEBOATS, ETC	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • inspect, lube and verify proper maintenance of davit mechanism • function test davit, release mechanism and braking system as and when required • inspect and verify all expiration dates are current • verify all controls and systems are functioning properly • verify all required (USCG, etc.) exterior markings are present, as per requirements • perform all required preventative maintenance 	
44. FORKLIFT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • service and repair hydraulic, mechanical and electrical systems • maintain and repair the hoisting system, drive train, etc. • verify that all required and manufacturer supplied alarms and equipment guards are in place and functioning properly • perform all required preventative maintenance 	
45. FUEL SYSTEM	DEMONSTRATES : <ul style="list-style-type: none"> • adequate knowledge of the main engine fuel system • adequate procedures are in place to handle, store, transfer and contain fuel safely 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • adequately troubleshoot, maintain, service and repair system lines, centrifuge, pumps, valves, etc. • handle, store, transfer and contain fuel properly • maintain records of fuel received, consumed and transferred to other areas, i.e. pits, cement unit, fuel powered third party equipment, heater day tanks, E. Gen. Day tanks, etc. 	

BASIC MECHANIC, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
46. LIVING QUARTERS & GALLEY	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none">• troubleshoot, maintain, service and repair equipment inside living quarters and galley, i.e. washing machines, clothes dryers, piping, valves, galley equipment, etc.• perform all required preventative maintenance on necessary equipment inside living quarters	

BASIC ELECTRICIAN

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. ELECTRICAL TRAINING AND EVALUATION	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • ensure that personnel are aware of and adhere to all applicable regulatory requirements and company policies • instruct personnel in proper work techniques and procedures • identify personnel that demonstrate potential and/or willingness to be trained • determine which training different personnel need in order to progress • supply feedback to personnel on work performance 	
	DEMONSTRATES WILLINGNESS TO: <ul style="list-style-type: none"> • assign the more experienced personnel to instruct the less experienced personnel 	
2. PLANNING WORK ACTIVITIES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • identify and set priorities on the work to be done • direct, train and coordinate crewmembers to safely complete the work, including lockout, tag-out and PPE • check that appropriate tools are available and in proper working order • ensure availability of the required parts and/or tools needed to complete the work • properly prepare a work permit and any required risk assessments 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
3. COMMUNICATION	UNDERSTANDS: <ul style="list-style-type: none"> • requirement to advise supervisor of current and/or changing conditions 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • schedule equipment maintenance and/or repair with other departments, i.e. OIM, Driller, Drill Crew, Mechanic, Third Party, Crane Operator, Deck Crew, Barge Engineer, etc. • coordinate drills and periodic testing of equipment, as required • plan and coordinate with other departments prior to any major activity such as rig moves, regulatory inspections, etc. • adequately prepare hand-over notes for relief 	
4. INVENTORY	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • determine and verify adequate supplies of spare parts • requisition additional parts and/or supplies to maintain adequate inventory • ensure that rotation of spare parts for use is being accomplished 	
5. RECORDS AND LOGS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • maintain planned and preventative maintenance records • ensure engine room logs are maintained • ensure that crane reports are maintained • ensure electrical isolation logs are maintained • maintain records of readings and tests 	
6. BLUE PRINTS AND ELECTRICAL SCHEMATICS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • read and interpret prints and schematics • properly use modification procedures 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
7. TECHNICAL MANUALS AND REFERENCES	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • find appropriate source material • collate information from various sources • understand and use indices and reference sources to find information regarding parts, repairs, replacements and/or operational procedures, repair procedures, etc. 	
8. EQUIPMENT IN HAZARDOUS AREAS	DEMONSTRATES: <ul style="list-style-type: none"> • knowledge of the different zones and equipment that should be used in each zone • knowledge of the various types of protection and protective devices for electrical equipment 	
	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • inspect, troubleshoot, maintain, service and repair equipment in hazardous areas so that they may remain intrinsically safe 	
9. TOOLS AND REPAIR/TEST EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • gather data from instruments, logs and other sources • use and interpret data • properly select and use tools and repair and test equipment 	
10. OPERATION AND UTILIZATION OF EQUIPMENT	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • evaluate equipment performance • apply diagnostic capability by utilizing source materials, operating manuals, the ability to interpret past and present performance of equipment, etc. • monitor usage of equipment • interpret and collate equipment usage and performance data • appropriate selection of equipment to be used for maximum efficiency 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
11. THIRD PARTY EQUIPMENT	DEMONSTRATES: <ul style="list-style-type: none"> • basic knowledge of maintenance and repair of routine third party equipment, under their direction 	
12. POWER DISTRIBUTION SYSTEM: GENERATORS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • start and bring generators (main and emergency) on line for single and parallel operation • restore rig power following shutdown • troubleshoot, service, maintain and repair generator, including control system • measure insulation resistance of windings • monitor and adjust generator operating parameters • clean and inspect windings and exciters • perform all required preventative maintenance 	
13. POWER DISTRIBUTION SYSTEM: BREAKERS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • set operational parameters • isolate circuits • troubleshoot, service, maintain and repair breakers, including removing breakers if required and installing replacement 	
14. POWER DISTRIBUTION SYSTEM: TRANSFORMERS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • set operational parameters • clean and test insulation of windings and to check the connections • troubleshoot, service, maintain and repair transformers 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>15. POWER DISTRIBUTION SYSTEM: SWITCHBOARD</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • clean inside switchboard, including bus bars, following proper procedures • properly check connections • troubleshoot, service, maintain and repair switchboard 	
<p>16. MOTORS & CONTROLS: D. C. MOTORS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • clean, inspect, repair/replace brushes, brush gear, commutator, windings and connections • measure insulation resistance of windings • test field • troubleshoot and clear ground faults • perform all required preventative maintenance 	
<p>17. MOTORS & CONTROLS: D. C. MOTOR CONTROL SYSTEM</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • troubleshoot, service, maintain and repair control circuits • maintain, perform diagnostic testing and replace SCRs • remove, clean and replace cell stacks • ability to load share motors that are coupled together • ability to check, maintain and calibrate meters 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
18. MOTORS & CONTROLS: A. C. MOTORS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • clean and inspect windings and connections • replace bearings • measure insulation resistance of windings • troubleshoot and clear ground faults • troubleshoot, service, maintain and repair A. C. motors • properly connect single phase and multi- phase motors to power supply • change direction of A. C. motor • perform all required preventative maintenance 	
19. MOTORS & CONTROLS: A. C. MOTOR STARTERS	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • clean and inspect magnetic contactors and overloads (thermal and magnetic) • troubleshoot and replace fuses, timers, overloads, contacts, breakers, etc. • maintain other equipment such as motor space heating circuits, etc. • test and adjust overload settings • perform all required preventative maintenance 	
20. MOTORS & CONTROLS: CONTROL SYSTEM	DEMONSTRATES THE ABILITY TO: <ul style="list-style-type: none"> • install, troubleshoot, and repair multiple start/stop stations • install, troubleshoot and repair switches • install, troubleshoot and repair timers, relays and solid state switching devices 	

BASIC ELECTRICIAN, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
21. JACKING SYSTEM	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • perform all required preventative maintenance • equalize and/or set motor brake torques as required • “pop brakes” and all other required pre-start checks prior to engaging jacking system • check and calibrate jacking system electrical current monitoring system 	
22. CRANES	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • perform all planned and preventative maintenance • troubleshoot, service, maintain and repair crane control system, brakes, motors, electrical systems, etc. 	
23. ALARM AND COMMUNICATION SYSTEMS	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • knowledge of different alarm and communication systems • suitable knowledge of the internal communication system 	
	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • perform all planned and preventative maintenance • test and calibrate alarm systems and sensors • troubleshoot, service, maintain and repair alarm and communication systems 	
24. REFRIGERATION AND AIR CONDITIONING	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • troubleshoot, service, maintain and repair refrigeration and air conditioning equipment • perform all planned and preventative maintenance • perform diagnostic functions 	

DRILLER AND ASSISTANT DRILLER

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. BASIC RIGGING	<p>DEMONSTRATES A KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • rigging and safe use of rigging equipment • basic knot tying and correct application • use of “Tag” Lines and correct application • correct communication when lifting loads 	
2. MIXING, HANDLING AND SUPERVISING THE USE OF DRILLING FLUIDS AND SIMILAR PRODUCTS	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • safe handling of drilling fluid products • proper body mechanics • measurement methods of drilling fluids • proper use of bulk handling systems <p>EXPLAINS AND/OR DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper storage of drilling fluid products • proper disposal of by-products • proper disposal of hazardous and non-hazardous waste • function and proper use and maintenance of solids control equipment <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • maintain, repair and trouble shoot mud pumps • maintain required records 	
3. SAFE USE OF HAND AND POWER TOOLS	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper use care, and storage of hand and power tools • use of proper PPE for tasks using hand and power tools 	

DRILLER AND ASSISTANT DRILLER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
4. KNOWLEDGE OF RESPONSIBILITIES DURING EMERGENCIES	DEMONSTRATES: <ul style="list-style-type: none"> • proper use of fire fighting equipment • proper use of SCBA packs • ability to carry duties as assigned on the Station Bill and/or Muster List 	
5. PROPER POLLUTION CONTROL	DEMONSTRATES: <ul style="list-style-type: none"> • methods to Control and Contain Spills 	
6. SAFE JOB PERFORMANCE	DEMONSTRATES ABILITY TO: <ul style="list-style-type: none"> • analyze the requirements for potentially hazardous tasks • comply with applicable rules and regulation and/or policies for working at heights • establish and use pro-active safety measures including pre-tour and toolbox meetings DEMONSTRATES AN UNDERSTANDING OF: <ul style="list-style-type: none"> • risks associated with high and low pressures 	
7. USE OF SPECIALIZED RIG EQUIPMENT AND PROCEDURES	DEMONSTRATES: <ul style="list-style-type: none"> • proper use of air tuggers • proper use of rolling equipment (forklift, "cherry picker") 	
8. USE OF DOWN HOLE DRILLING EQUIPMENT	DEMONSTRATE THE ABILITY TO: <ul style="list-style-type: none"> • identify the proper use and application of drilling tubulars • identify the proper use and application of "special" drilling tools • properly assemble drilling tools 	

DRILLER AND ASSISTANT DRILLER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>9. OPERATING AND MAINTAINING RIG FLOOR EQUIPMENT</p>	<p>DEMONSTRATES THE PROPER:</p> <ul style="list-style-type: none"> • use of manual slips, tongs, elevators and other basic tubular handling tools • use of automatic pipe handling tools • use of drill string hoisting and rotating equipment • operation of slick line equipment • operation of slick line equipment • use and alignment of rig floor valves for mud, choke and kill line manifolds during drilling and well control operations • use and maintenance of chocks and lo-torque valves • use of wash down equipment • method of slipping and cutting drill line • use of pneumatic and hydraulic equipment <p>EXPLAINS:</p> <ul style="list-style-type: none"> • proper maintenance of drill string hoisting and rotating equipment • maintenance of pneumatic and hydraulic equipment • theory and method of preventive maintenance • Demonstrate the Proper movement of heavy equipment on rig floor 	

DRILLER AND ASSISTANT DRILLER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
10. USE OF EQUIPMENT IN VARIOUS OPERATIONS	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper procedures involved in down hole operations and explain the reasons for the procedures <p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • use available reference materials <p>ACCURATELY IDENTIFY AND EXPLAIN:</p> <ul style="list-style-type: none"> • rig floor instrumentation 	
11. RIG MOVE OPERATIONS	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • rig move operation procedures and explain the reasons as related to their assigned duties on their particular rig 	
12. WELL CONTROL	<p>IDENTIFIES:</p> <ul style="list-style-type: none"> • down hole well conditions <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • procedures to shut in a well • understanding of basic geology <p>EXPLAINS:</p> <ul style="list-style-type: none"> • notification process and communication procedures during well control 	

DRILLER AND ASSISTANT DRILLER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>13. MANAGEMENT</p>	<p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • provide Leadership • use time effectively • communicate effectively • train crew members • perform proper record keeping • read, write and perform basic math <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • a knowledge of Company and Regulatory Safety and Health Requirements, Regulations for the area in which they are assigned 	

TOOLPUSHER

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. HEALTH SAFETY & ENVIRONMENT	<p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • plan and conduct safety meetings for supervisors • plan and conduct pre-tour and toolbox talks • communicate Health & Safety policies to all rig crew members • coordinate investigation of all safety/environmental incidents and provide management with corrective measures • conduct regular safety inspections of the rig • plan with all department heads to discuss safe daily operations 	
2. MARINE	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • stability – ballasting and deballasting <p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • plan operations with the Marine Department- mooring, setting anchors • evaluate weather condition • supervise and perform jacking operations while assigned to Jack-up Drilling Units 	
3. EQUIPMENT	<p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • direct the application of the company's preventive and planned maintenance programs • organize the maintenance of equipment by setting priorities on equipment repairs • evaluate rig equipment and systems usage by ensuring operational parameters and limits are observed • supervise the testing and checking of equipment and systems • supervise activities to ensure the rig's structural integrity is maintained 	

TOOLPUSHER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>4. LIVING ENVIRONMENT & SERVICES</p>	<p>DEMONSTRATES ABILITY TO COORDINATE:</p> <ul style="list-style-type: none"> • maintenance of a sanitary living environment • procedures and facilities for food storage, handling and preparation <p>DEMONSTRATES ABILITY TO CONTROL:</p> <ul style="list-style-type: none"> • rig medical operations • rig communication 	
<p>5. EMERGENCY DUTIES</p>	<p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • supervise, participate in and critique Emergency Drills • control the well in emergency situations • direct well control operations • direct the crew while handling a loss of rig stability • make decisions to evacuate or abandon the rig in consultation with OIM, if different person • direct the crew in other emergencies 	
<p>6. OPERATIONS</p>	<p>DEMONSTRATES ABILITY TO SUPERVISE:</p> <ul style="list-style-type: none"> • drilling • use and operation of the BOP and other associated equipment • other ordinary drilling operations such as coring, fishing, working stuck tools, etc. • application of appropriate well control measures • planned rig moves and camp moves <p>DEMONSTRATES ABILITY TO ORGANIZE AND SUPERVISE:</p> <ul style="list-style-type: none"> • tests of the well 	

TOOLPUSHER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>7. MANAGEMENT OPERATIONS</p>	<p>DEMONSTRATES THE ABILITY TO:</p> <ul style="list-style-type: none"> • ensure Rig Personnel are being trained to meet the company's training requirements • ensure operations are performed in accordance with Policies and Procedures and applicable regulatory agencies • maintain record keeping/logs as they apply to the requirements of the company and regulatory agencies • plan work for crews • evaluate the rig supervisors • provide motivation to supervisors and crews • supervise adherence to safety policies and procedures • provide leadership • control the budget and warehouse inventory • ensure Rig Manager or immediate supervisor is advised of all current and/or changing conditions • plan and coordinate overall logistics for rig operation • coordinate logistics and operations with operator's representative • coordinate the utilization of equipment and manpower • maintain good communication of information • ensure the drilling program is carried out in a safe and efficient manner • ensure subordinates know, understand and follow the guidelines of the rig's marine operations manual, company well control policies and other general operating policies and procedures 	

TOOLPUSHER, CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>8. TECHNICAL SKILLS</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • calculations for riser space out and tension • cementing calculations and cementing operations • casing running operations • well control procedures <p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • research information on parts, equipment, data and/or operations procedures as required • control the physical presence of fixed assets and inventories • read and understand schematic diagrams • perform all technical calculations required for the safe operation of the drilling unit • interpret and respond to downhole conditions • interpret the various gauges, meters and instruments required to carry out operations • use technical manuals or sources to find information on parts, equipment, data and/or procedures 	

OFFSHORE INSTALLATION MANAGER (OIM)

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. SAFE BALLASTING AND DEBALLASTING OPERATIONS AND ACCOUNTING OF CHANGES IN DECK LOADS	DEMONSTRATES KNOWLEDGE OF: <ul style="list-style-type: none"> • relevant international and national standards concerning stability • loading stability information as may be contained in or derived from stability and trim diagrams, operation manual, and/or computer-based loading and stability programs 	
2. OPERATIONAL CONTROL OR TRIM, STABILITY AND STRESS	DEMONSTRATES KNOWLEDGE OF: <ul style="list-style-type: none"> • fundamental principles of MOU construction, including principal structural members and required periodic inspections • effects of welding, and effects of corrosion on the structure • fundamental principles and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability (afloat mode) • stability criteria for MOUs (static and dynamic), environmental limits and criteria for survival conditions • inclining experiment, deadweight survey, and their use 	
	DEMONSTRATES: <ul style="list-style-type: none"> • use of daily loading calculations • knowledge of the following effects: <ol style="list-style-type: none"> 14. on trim and stability of MOU in event of damage to and consequent flooding of a compartment, and countermeasures to be taken (afloat mode) 15. of loading supplies and ballasting in order to keep the unit's stresses within acceptable limits 16. of mooring systems and mooring line failure 17. of pre-loading and leg stresses on self-elevating units 18. loss of buoyancy 	

OFFSHORE INSTALLATION MANAGER (OIM), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
3. SAFETY AND SECURITY OF MOU PERSONNEL AND THE OPERATIONAL CONDITION OF LIFE-SAVING, FIRE FIGHTING AND OTHER SAFETY SYSTEMS	DEMONSTRATES KNOWLEDGE OF: <ul style="list-style-type: none"> • life saving appliance regulations (International Convention for the Safety of Life at Sea) as applicable to MOUs • organization of fire and abandon ship drills • maintenance of operational condition of life saving, fire fighting and other safety systems • actions to be taken to protect and safeguard all persons on board in emergencies, including evacuation • actions to limit damage following a fire, explosion, collision, or grounding • precautions to be taken before onset of heavy weather 	
4. EMERGENCY AND DAMAGE CONTROL PLANS AND EMERGENCY SITUATIONS	DEMONSTRATES KNOWLEDGE OF: <ul style="list-style-type: none"> • preparation of contingency plans for response to emergencies • vessel construction, including damage control • methods and aids for fire prevention, detection and extinction • functions and use of life saving appliances • procedures for evacuation from MOU • precautions to be taken before onset of heavy weather 	
5. RESPONDING TO EMERGENCIES	DEMONSTRATES KNOWLEDGE OF: <ul style="list-style-type: none"> • emergency procedures • the effect on trim and stability of flooding due to damage, fire fighting or other reasons and countermeasures to be taken • effective communication concerning stability related information 	

OFFSHORE INSTALLATION MANAGER (OIM), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>6. MAINTAIN MOU SAFE FOR TRANSIT, STATION KEEPING, MOORING AND DYNAMIC POSITIONING CONDITIONS</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • 1972 Collision Regulations, as amended • navigation and electronic navigational aids appropriate to the type of MOU • towing procedures, including recovery of tow • sea bed composition and characteristics • behavior of mooring or jacking systems and force distributions, including the effect of environmental conditions • consequences of mooring or jacking system failure • anchor placement and recovery and working with anchor handling vessels <p>DYNAMIC POSITIONING SYSTEM:</p> <ul style="list-style-type: none"> • principles of dynamic positioning system, including capabilities and limitations of thrusters, power systems and maximum allowable position offsets (for dynamic position equipped vessels only) 	
<p>7. FORECAST WEATHER AND OCEANOGRAPHIC CONDITIONS</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • characteristics of weather systems • sources of weather information • effects of weather on the MOU environmental limits <p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • apply available meteorological information to ensure safety of MOU and upon request, supply other vessels or aircraft with information 	

OFFSHORE INSTALLATION MANAGER (OIM), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>8. PLAN AND ENSURE SAFE TRANSFER OF PERSONNEL</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • precautions to be taken during transfer of personnel • use of the personnel basket • helicopter transfers • vessel transfers • effect of environmental conditions on method of personnel transfer 	
<p>9. ENSURE SAFE LOADING, STOWAGE, SECURING AND HANDLING OF SUPPLIES, INCLUDING DANGEROUS GOODS</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • effect on trim and stability of cargoes and cargo operations • safe handling, stowage and care of equipment, supplies and dangerous goods • crane and lifting equipment, and their inspections • procedures for loading and discharge of helicopters and supply vessels • precautions during loading, and unloading and use of dangerous, hazardous or harmful goods 	
<p>10. PREVENTION OF POLLUTION</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • methods and aid to prevent pollution o the environment, including the following: <ol style="list-style-type: none"> 1. Pollution prevention systems and controls 2. Pollution control procedures, including the unit's MARPOL I/26 and article 3 of OPRC Convention shipboard Oil Pollution emergency Plan, MARPOL Annex V Waste Management Plan and any plan dealing with dangerous/hazardous goods 	

OFFSHORE INSTALLATION MANAGER (OIM), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>11. MONITOR AND CONTROL SAFE WORK PRACTICES</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • safe working practices, including: <ol style="list-style-type: none"> 1. occupational safety, health and hygiene 2. hazardous area 3. permits to work 4. work over water 5. work in confined spaces • personnel training, organization and communication • safety equipment inspection <p>DEMONSTRATES ABILITY TO:</p> <ul style="list-style-type: none"> • understand and inspect safety equipment • identify, evaluate, control new hazards through engineering controls or safe working practices 	
<p>12. MONITOR AND CONTROL COMPLIANCE WITH LEGISLATIVE REQUIREMENTS AND MEASURES TO ENSURE SAFETY OF LIFE AT SEA AND THE PROTECTION OF THE MARINE ENVIRONMENT</p>	<p>DEMONSTRATES KNOWLEDGE OF:</p> <ul style="list-style-type: none"> • international maritime law embodied in international agreements and conventions, with special regard to the following: <ol style="list-style-type: none"> 1. Certificates and other documents required to be carried on board MOUs by international conventions and/or agreements 2. Responsibilities under the relevant requirements of the: <ol style="list-style-type: none"> a. International Convention on Load Lines b. International Convention for the Safety of Life at Sea c. International Convention for the Prevention of Pollution from ships 3. Maritime declarations of health and the requirement of the International Health Regulations 4. Responsibilities under international instruments affecting the safety of the MOU, visitors, crew and cargo 5. Methods and aids to prevent pollution of the marine environment by MOUs 6. National legislation for implementing international agreements and conventions 	

OFFSHORE INSTALLATION MANAGER (OIM), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
13. MONITOR AND CONTROL INDUSTRIAL OPERATIONS IMPACTING MARITIME SAFETY	DEMONSTRATES KNOWLEDGE AND APPRECIATION OF: <ul style="list-style-type: none"> • interrelationship between marine operations and specific industrial activities including, where appropriate, the following: <ol style="list-style-type: none"> 1. drilling and maintenance of wells 2. construction and offshore maintenance and repair 3. production 4. accommodation support 5. lifting operations 6. pipe laying 7. diving 8. fire fighting support 	

HEALTH, SAFETY AND ENVIRONMENT (HSE)

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
1. HEALTH AND SAFETY ENVIRONMENTAL POLICIES AND PROCEDURES	EXPLAINS: <ul style="list-style-type: none"> • company health and safety policies and procedures • appropriate actions to be taken to comply with company health and safety policy and procedure • proper waste management procedures MAINTAINS: <ul style="list-style-type: none"> • good housekeeping practices for work area • personnel hygiene in accordance with company policy and procedure ACTIVELY PARTICIPATES IN: <ul style="list-style-type: none"> • all applicable safety meetings 	
2. KNOWLEDGE OF SAFETY IN THE WORKPLACE	UNDERSTANDS AND EXPLAINS: <ul style="list-style-type: none"> • company health and safety policies and procedures • company permit procedures • proper reporting procedures for HSE incidents • company requirements for working at heights • company requirements for working over water IDENTIFIES: <ul style="list-style-type: none"> • potential hazards in the workplace ACTIVELY PARTICIPATES IN: <ul style="list-style-type: none"> • safety meetings 	

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>3. KNOWLEDGE OF PROPER USE OF PERSONNEL PROTECTIVE EQUIPMENT</p>	<p>DEMONSTRATES PROPER USE OF THE FOLLOWING:</p> <ol style="list-style-type: none"> 1. Hardhats 2. Safety glasses 3. Footwear 4. Clothing 5. Aprons 6. Face Shields 7. Goggles 8. Gloves 9. Respirators 10. Hearing protection 11. Fall protection/restraining devices 12. Personnel floatation devices 13. Skin protection 	
<p>4. SAFE USE, CARE AND DISPOSAL OF POTENTIALLY HAZARDOUS SUBSTANCES</p>	<p>UNDERSTANDS AND FOLLOWS:</p> <ul style="list-style-type: none"> • safe work procedures while handling and/or working with chemicals <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • appropriate actions to be taken in the event of exposure and/or contact with a potentially hazardous substance <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • proper storage locations for potentially hazardous substances 	

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
5. SAFE MATERIAL HANDLING	<p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper lifting techniques while moving materials <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • hazards associated with manual lifting • device or equipment which can be used to assist with material handling • other potential hazards associated with material handling <p>EXPLAINS:</p> <ul style="list-style-type: none"> • appropriate company policies and procedures regarding the manual handling of materials 	
6. EMERGENCY RESPONSIBILITIES	<p>UNDERSTANDS AND EXPLAINS:</p> <ul style="list-style-type: none"> • personal responsibilities as identified on station bill • proper use of emergency equipment • alarm signals and actions to be taken in response • other emergency alarms and responses, i.e. man overboard <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • locations of emergency equipment in the working area • location of alarm actuators 	

HEALTH, SAFETY AND ENVIRONMENT (HSE), CONTINUED

KNOWLEDGE	SKILLS/ABILITY	PERFORMANCE MEASUREMENT
<p>7. COMPETENT FIRE WATCH</p>	<p>UNDERSTANDS:</p> <ul style="list-style-type: none"> • fire triangle • types and sizes of fire extinguishers found on drilling rigs and their applications • roles of a fire watcher, e.g., fire protection, protect welder, etc. • how to prepare an area for 'hot work' <p>DESCRIBES:</p> <ul style="list-style-type: none"> • responsibilities during fire work • responsibilities of a fire watcher at the conclusion of 'hot work' activity <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • how to use a fire extinguisher 	
<p>8. HOUSEKEEPING AND ORGANIZATION</p>	<p>EXPLAINS:</p> <ul style="list-style-type: none"> • importance of good housekeeping <p>IDENTIFIES:</p> <ul style="list-style-type: none"> • advantages of good housekeeping <p>DEMONSTRATES:</p> <ul style="list-style-type: none"> • proper storage of tools, materials and equipment to maintain proper housekeeping • proper disposal of trash, rags, scrap, used oil, solvents and thinners and any other material specific to your job - Specify: _____ 	