SLICKLINE OPERATOR WORKBOOK

IMPORTANT NOTE:

1. Your point of reference to complete this workbook may be obtained from the following
   - Training Manual and any other training materials provided together with this workbook
   - Your Trainer, Assessor (Slickline Operator), Verifier (FSM) or senior colleagues
   - SOP / Quality Procedures & Processors
2. The completion of this Workbook is a joint effort and responsibility between you and your assessor therefore you have the obligation to request from your assessor to be assessed upon your completion of each topic
3. The completion of this Workbook is part of the MANDATORY requirements which you must fulfill to qualify for a promotion
4. Your training program is mostly self-driven, including this Workbook. It requires individual initiatives, dedication and commitment to complete the process.

NAME	**MOHD YANI BIN MOHD AZMI**
DATE OF JOIN	**DECEMBER 20212**
CONTACT NO.	**011-39109091**
RECEIVED DATE	
DATE COMPLETED	**05 JUNE 2024**

A. HSSE

Legend: **C**-Competent, **NME**-Need More Exposure

Document No.	HSE and control critical situations	Assessment / Verification	Competency C	Competency NME	Assessment Date
FORM A.1	**PERFORM UNSAFE ACT AUDITS**				
	1. What is the purpose of Unsafe Act Auditing Is aimed to elimating unsafe situations and practices by a method of constructive dialogue between managers and workers.	Good	✓		10/06/24
	2. What is the purpose of hazardous area classification? reduce the chance of an explosive/flammable atmosphere contacting an ignition source.	Gud	✓		10/06/24
	3. Name four necessary checks required on a wireline unit that qualify it for Zone 2? - Check for spark arrestor condition. - Mini cooler need to be clean. - ESD system properly functioning. - RPM cut off system properly functioning.	Gud	✓		10/06/24
	4. Outline the key processes involved in completing Unsafe Act Auditing. 1. Identification and Documentation 2. Root Cause Analysis 3. Risk Assessment 4. Intervention and Corrective Actions 5. Monitoring and Continuous Improvement	Good	✓		10/06/24
	5. Why do we need PTW system to manage work activities? To ensure that high-risk activities are carried out safely and with the necessary precautions in place. The system aims to protect workers from injury or harm and prevent damage to equipment, facilities, and the environment.	Gud	✓		10/06/24

FORM A.2	CONTROL CRITICAL SITUATIONS				
	1. Prior to carrying out operations in H2S environment what are the necessary preparations that need to be taken. 1. **Risk Assessment**: Conduct a thorough assessment to identify potential on-site sources of H2S and determine the concentration levels. 2. **Safety Training**: Ensure all personnel are trained on the characteristics of H2S, its effects on those exposed, and the proper use of safety equipment. 3. **Personal Protective Equipment (PPE)**: Equip workers with the appropriate PPE. 4. **Monitoring and Detection**: Install adequate H2S monitoring and detection equipment on the drilling rig or operation site. 5. **Contingency Plan**: Develop a contingency plan that includes responsibilities and duties of personnel, information on physical effects of H2S and SO2 exposure, and procedures for different levels of alarm conditions. 6. **Ventilation**: Maintain continuous ventilation, especially when working in confined spaces.	GWd	✓		10/06/24

	2. How would you respond to the following critical situations? a) H2S release at wellhead: Stop work. Secure workplace and head to H2s muster station usually at high place area or Helideck. b) Gas release at wellhead: Stop work. Secure the well by activated ESD at control panel and after that close all xmass tree valve. Head to muster station. c) Extreme adverse weather conditions: Secure all equipment and any loose item. Assemble at safe place and make sure all crew are there. d) Equipment failure: Power pack rig saver failure when gas is being released; BOP jammed open while attempting to close during emergency: 1. **Power Pack Rig Saver Failure**: The power pack rig saver is a critical component in drilling operations. If it fails during an emergency, it can lead to serious consequences. The power pack is responsible for providing hydraulic pressure to various systems, including the blowout preventer (BOP). 2. **Gas Release**: When gas is being released (possibly due to a well kick or blowout), the BOP should be activated to prevent uncontrolled flow. However, if the power pack rig saver fails, it may not be able to close the BOP as intended. 3. **BOP Jammed Open**: The blowout preventer (BOP) is designed to seal the wellbore in case of an emergency. If it jams open during an emergency situation, it can allow gas, oil, or other fluids to escape uncontrollably, posing a significant risk to personnel, the environment, and the rig itself. 4. **Emergency Response**: In such a scenario, the drilling crew must follow emergency procedures. This may involve activating backup systems, shutting down the well, and ensuring the safety of personnel. Communication with the control room and other relevant parties is crucial. 5. **Investigation and Prevention**: After the incident, a thorough investigation should take place to determine the root cause of the power pack rig saver failure and BOP malfunction. Preventive measures can then be implemented to avoid similar incidents in the future.	GwA	✓		10/06/24

	e) Sudden exposure to toxic substances: Pipe connections failure during pumping of acid: 1. **Safety First**: Ensure that everyone in the vicinity is safe. Evacuate the area if necessary and follow any emergency protocols. 2. **Isolate the Source**: Identify the specific pipe or connection that failed. If possible, shut off the acid supply to prevent further exposure. 3. **Personal Protective Equipment (PPE)**: If you're directly involved, make sure you're wearing appropriate PPE, including acid-resistant gloves, goggles, and protective clothing. 4. **Ventilation**: Open windows or use exhaust fans to improve ventilation and disperse any lingering acid fumes. 5. **Neutralization**: Depending on the type of acid, consider neutralizing it. 6. **First Aid**: If anyone is exposed to acid. 7. **Seek Medical Attention**: Even if symptoms are not immediately apparent, seek medical help promptly. Acid exposure can cause delayed effects. 8. **Containment and Cleanup**: Safely contain any spilled acid using appropriate materials (acid-resistant containers, absorbent materials, etc.). Dispose of it properly according to regulations. 9. **Investigate the Cause**: Determine why the pipe connection failed. Was it due to corrosion, material failure, or improper installation? Address the root cause to prevent future incidents. 10. **Report the Incident**: Notify relevant authorities, your supervisor, and any other relevant parties about the incident. f) Man overboard: 1. **Sound the Alarm**: Alert everyone on board by shouting "Man overboard!" or using a whistle or horn. This will notify others and increase the chances of a swift rescue. 2. **Keep Visual Contact**: Keep your eyes on the person in the water. If you can see them, it's easier to guide rescuers to their location. 3. **Throw a Flotation Device**: Toss a lifebuoy, life jacket, or any other floating object toward the person. Make sure it's securely tied to a rope so they can hold on.	Good	✓		10/06/24

	4. **Mark the Spot**: Throw a floating smoke signal or deploy a buoy with a flag to mark the spot where the person fell overboard. This helps rescuers locate them. 5. **Initiate Rescue Procedures**: Follow your vessel's emergency procedures. This may involve stopping the engine, turning the boat around, and deploying a rescue boat or life raft. 6. **Assign Roles**: Designate someone to keep visual contact with the person in the water while others focus on rescue efforts. 7. **Retrieve the Person**: Use a rescue boat, lifebuoy, or other means to retrieve the person from the water. Be cautious not to endanger yourself during the rescue. 8. **Provide First Aid**: Once the person is back on board, administer first aid if needed. Check for injuries, hypothermia, and provide warmth and comfort.	Gwd	✓		10/06/24

	3. Briefly explain with a diagram the emergency command structure at worksite and specifically highlighting your role in the structure. 1. **Emergency Response Plan (ERP)**: o An **Emergency Response Plan (ERP)** is a comprehensive action plan designed to address all types of emergencies that may occur during the construction and operation of an oil and gas project. o The ERP provides procedures and action plans to promote an effective response when faced with emergency situations. o Major objectives of the ERP include: ▪ Identifying potential emergency situations that can cause harm to humans or the environment. ▪ Providing guidance for preparedness and response. ▪ Proposing mitigation measures to prevent accidents and minimize environmental impacts. 2. **Emergency Concept**: o All employees should be prepared for emergency events. Preparedness includes ensuring: ▪ Emergency equipment is in place and functional. ▪ An effective Emergency Plan exists. ▪ Employees are aware of their roles during emergencies. 3. **Scope of ERP for Oil and Gas Projects**: o The ERP should cover various Environment, Health, and Safety (EHS) related emergency scenarios. o Legal requirements that inform the ERP include: ▪ Occupational Safety and Health Act 1994 (OSHA). 4. **Emergency Response Team (ERT)**: o An ERT is an internal team responsible for handling emergency situations. o ERT members should be trained in fire-fighting, first aid, and related aspects. o Their roles include: ▪ Controlling or limiting the impact of emergencies onsite or in neighboring areas. ▪ Facilitating emergency response and providing appropriate assistance.	Good	✓		10/06/24

	▪ Establishing communication channels with local, regional, and federal emergency response networks. 5. **Slickline Operator Role**: ○ The slickline operator plays a critical role during emergencies: ▪ **Immediate Response**: If an emergency occurs during slickline operations (e.g., well intervention), the slickline operator must follow safety protocols and evacuate the area if necessary. ▪ **Communication**: The operator communicates the emergency situation to the ERT and other relevant personnel. ▪ **Assistance**: The operator assists in implementing the ERP procedures, such as shutting down equipment or securing the well. ▪ **Coordination**: During well control incidents, the slickline operator collaborates with other team members (e.g., drilling crew, well control specialists) to mitigate risks.	Good	✓		10/06/24

FORM A.3	MANAGE CRITICAL WELL INTEGRITY SITUATIONS

	1. List down the possible critical situations that can affect the well integrity. 1. **Casing and Cement Failures**: The primary barrier in well integrity is the well casing—a large steel pipe inserted into the drilled hole and cemented in place. If the casing or cement fails, it can lead to fluid leaks from the well into the surrounding environment. Regular inspections and maintenance are essential to prevent such failures. 2. **Corrosion**: Corrosion can weaken the casing, tubing, and other well components over time. It may result from exposure to corrosive fluids, high temperatures, or chemical reactions. Detecting early signs of corrosion through visual inspections and chemical tests is crucial to maintaining well integrity. 3. **Formation Damage**: During drilling or production, wellbore fluids can interact with the surrounding rock formations. If the formation is damaged, it can compromise the well's integrity. Proper well design, drilling practices, and monitoring are essential to prevent formation damage. 4. **Pressure Changes**: Sudden pressure changes due to well operations (such as shut-ins, startups, or workovers) can stress the well components. If not managed properly, pressure fluctuations can lead to casing failures or leaks. 5. **Gas Migration**: Gas migration occurs when gas moves from the reservoir into the annular space between the casing and the formation. This can weaken the cement bond and create pathways for fluid migration. Gas migration must be prevented to maintain well integrity. 6. **Mechanical Damage**: Mechanical damage can occur during well interventions, workovers, or equipment installation. Scratches, dents, or other physical damage to the casing or tubing can compromise the well's integrity. 7. **Wellhead Failures**: The wellhead is a critical component that connects the well to surface facilities. Failures in wellhead seals, valves, or other components can lead to fluid leaks or uncontrolled flow.	Good	✓		10/06/24.

	8. **Loss of Zonal Isolation**: Zonal isolation refers to maintaining separate pressure zones within the well. If zonal isolation is lost due to poor cementing or other factors, fluids can migrate between different formations, risking well integrity. 9. **Environmental Factors**: Extreme temperatures, earthquakes, or other environmental events can impact well integrity. Wells in sensitive areas must be designed and monitored to withstand such conditions. 10. **Human Error**: Mistakes during drilling, completion, or maintenance can compromise well integrity. Proper training, adherence to procedures, and continuous monitoring are essential to prevent human-induced failures.	Good	✓		10/06/24

	2. When you lost control (for example, lubricator dismembered from a Christmas tree) during wireline operations what immediate actions do you take while working at a satellite well? 1. **Assess the Situation:** o Remain calm and quickly evaluate the severity of the situation. o Identify the specific component that has dismembered (e.g., lubricator from the Christmas tree). o Determine if there are any safety risks to personnel or the environment. 2. **Emergency Shutdown:** o If the dismemberment poses a safety risk (e.g., high-pressure fluid release), initiate an emergency shutdown. o Follow the well-specific emergency shutdown procedures. o Isolate the affected wellhead component (e.g., close the master valve). 3. **Notify Personnel:** o Alert other crew members and relevant personnel about the incident. o Use communication systems (radio, phone) to inform everyone on-site. 4. **Secure the Area:** o Establish a safe zone around the wellhead to prevent unauthorized access. o Ensure that no one approaches the dismembered component. 5. **Document the Incident:** o Record details of the incident, including time, location, and the specific component involved. o Take photos if possible (while maintaining safety). 6. **Contact Supervisors and Support:** o Notify your supervisor or company representative. o Seek guidance on the next steps and any additional resources needed.	Good	✓		20/04/24

	7. **Investigate the Cause:** o Once the situation is under control, investigate why the dismemberment occurred. o Was it due to equipment failure, human error, or other factors? 8. **Implement Corrective Measures:** o Based on the investigation, take corrective actions to prevent similar incidents in the future. o Update procedures, enhance training, or modify equipment as necessary. Remember that safety is the top priority. Always follow established protocols and communicate effectively with team during emergencies.	Good	✓		10/06/24

	3. What is the purpose of BOP in a lubricator configuration? A **slickline Blow Out Preventer (BOP)**, also known as a wireline valve, is secondary barrier, typically installed between the tree connection and the lower lubricator section in well operations. The purpose is: 1. **Isolation of Well Pressure**: The primary function of the slickline BOP is to **isolate the well pressure** without cutting the wireline. When necessary, the BOP can close the master valve, preventing well fluids from flowing up the slickline during maintenance or emergencies. 2. **Access for Slickline Cutter Assembly**: The BOP provides access for the assembly of a **slickline cutter** above its rams. This allows operators to prepare and drop a cutter if the toolstring becomes stuck in the well. 3. **Emergency Contingency**: In case of unexpected situations, such as a wireline break at the rope socket or a toolstring getting stuck, the BOP serves as an essential part of the contingency and emergency procedures. It ensures that the well can be safely shut in and the slickline tools can be recovered.	Good	✓		10/06/24

Assessed By:		Verified By	
Name	Sahrizan Bin Sapari	Name	AFIQ AIMAN BIN HASSAN Field Service Manager DIMENSION BID (M) SDN BHD
Position	SGSO	Position	
Date	10/06/24.	Date	10/6/24

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NAME	**MOHD YANI BIN MOHD AZMI**
DATE OF JOIN	**DECEMBER 2012**
CONTACT NO.	**011-39109091**
RECEIVED DATE	
DATE COMPLETED	**24 JUNE 2024**

A. HSSE

Legend: **C**-Competent, **NME**-Need More Exposure

Document No.	HSE and control critical situations	Assessment / Verification	Competency		Assessment Date
			C	NME	
FORM A.1	**PERFORM UNSAFE ACT AUDITS**				
	1. What is the purpose of Unsafe Act Auditing * Auditing for unsafe acts can remove the basic causes of accidents through the adoption of a proactive approach to safety. The process of auditing for unsafe acts is aimed at eliminating unsafe situations and practices by a method of constructive dialogue between managers and workers.		✓		24/06
	2. What is the purpose of hazardous area classification? * Hazardous Area Classification (HAC) study is done to evaluate and assess the Plant area based on the presence of Flammable material within the facility. HAC study provides details of Hazardous and Non-hazardous areas in a facility.		✓		24/06
	3. Name four necessary checks required on a wireline unit that qualify it for Zone 2? * Check ESD system * Over speed system * Check flame trap * Check grounding cable.		✓		24/06

	4. Outline the key processes involved in completing Unsafe Act Auditing. * Identification and documentation. * Root cause analysis * Risk assessment * Intervention and corrective action. * Monitoring and continuous improvement		✓		24/06
	5. Why do we need PTW system to manage work activities? * One of the main functions of PTW systems is to mitigate workplace hazards and minimise risk of accidents. By incorporating applications such as comprehensive risk assessment tools, safety procedures, and hazard identifications, e-PTW systems can help recognise potential risks associated with planned work activities.		✓		24/06

FORM A.2	CONTROL CRITICAL SITUATIONS				
	1. Prior to carrying out operations in H2S environment what are the necessary preparations that need to be taken. * Do assessment to identify potential of H2S and determine the concentration level. * Make sure all worker are fully trained about H2S. * Equip all worker with suitable PPE. * Make sure to install H2S detector at operation site. * Develop a contingency plan that include responsibility and duties of all personnel on site. * Make sure site have a good ventilation system.		✓		24/06

	2. How would you respond to the following critical situations? a) H2S release at wellhead: * Stop work. * Secure work area. * All personnel must go to H2S master section or high area. b) Gas release at wellhead: * Stop work. Secure well area. Push ESD system. Close xmas tree valve * Secure well area. * Push ESD button * Close all valve at xmas tree. * All personnel must go to muster station. c) Extreme adverse weather conditions: * Stop work. * Secure all equipment and loose item. * All personnel standby at safe place. d) Equipment failure: Power pack rig saver failure when gas is being released; BOP jammed open while attempting to close during emergency: * Stop work * Inform to WSS * Activate platform ESD button. * All personnel must go to muster station. e) Sudden exposure to toxic substances: Pipe connections failure during pumping of acid: * Ensure that everyone in the vicinity is safe. Evacuate the area if necessary and follow any emergency protocols * Identify the specific pipe or connection that failed. If possible, shut off the acid supply to prevent further exposure * If you're directly involved, make sure you're wearing appropriate PPE, including acid-resistant gloves, goggles, and protective clothing. * Ventilation: Open windows or use exhaust fans to improve ventilation and disperse any lingering acid fumes		✓		24/06

	* Depending on the type of acid, consider neutralizing it * Seek medical attention, acid exposure can cause delayed effects * Safely contain any spilled acid using appropriate materials (acid-resistant containers, absorbent materials, etc.). Dispose of it properly according to regulations. f) .Man overboard: * Shout man over board to inform other crew. * Don't lose sight of victim. * Throw a lifebuoy ring to the man overboard. * Inform to WSS and vessel around.				
	3. Briefly explain with a diagram the emergency command structure at worksite and specifically highlighting your role in the structure. * Wireline Operator • ESD the control panel using remote ESD or manual ESD at control panel • Discuss with the Supervisor for the next plan. * Wireline Senior Assistant • Activate the Platform Alarm and move to the Wireline Operator, wait for the next instruction from Wireline Operator * Wireline Junior Assistant • Shut off all Wireline engine (Generator, Air compressor and Power pack). Take work permit and report to the master station.		✓		24/06

FORM A.3	MANAGE CRITICAL WELL INTEGRITY SITUATIONS

	1. List down the possible critical situations that can affect the well integrity. * Human error - Mistakes during drilling, completion, or maintenance can compromise well integrity. Proper training, adherence to procedures, and continuous monitoring are essential to prevent human-induced failures *Corrosion - Corrosion of oil and gas wells can lead to structural integrity issues, well leaks, environmental risks, and reduced production efficiency * Formation damage - Formation damage causes substantial reductions in oil and gas productivity in many reservoirs. Damage can be caused by mechanical effects, chemical effects, and the action of bacteria or extreme temperatures associated with thermal recovery processes. * Mechanical Damage: Mechanical damage can occur during well interventions, workovers, or equipment installation. Scratches, dents, or other physical damage to the casing or tubing can compromise the well's integrity. * Wellhead Failures - Failures in wellhead seals, valves, or other components can lead to fluid leaks or uncontrolled flow.		✓		24/06
	2. When you lost control (for example, lubricator dismembered from a Christmas tree) during wireline operations what immediate actions do you take while working at a satellite well? * Stop work * Secure work area. * Close BOP ram. * Close all valve at xmas tree * Activate platform ESD if high pressure release still continue. * Inform to WSS about the situation.		✓		24/06

	3. What is the purpose of BOP in a lubricator configuration? * A slickline BOP (also known as a wireline valve) is generally installed between the tree connection and lower lubricator section. The BOP provides facilities for contingency and emergency procedures and must be included in all rig-ups. * Enable the well pressure to be isolated without cutting the wire by closing the master valve. * Provide access for the assembly of a slickline cutter above the BOP rams. * Allow a wireline cutter to be prepared and dropped if the toolstring becomes stuck in the well. * Enable 'stripping' of the wire through closed rams, only when necessary		✓		24/06

Assessed By:		Verified By	 AFIQ AIMAN BIN HASSAN Field Service Manager DIMENSION BID (M) SDN BHD
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Position	SGO	Position	
Date	24/06/2024	Date	24/6/24