

# **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.

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<b>DATE OF JOIN</b>	DECEMBER 2012
<b>CONTACT NO.</b>	011-39109091
<b>RECEIVED DATE</b>	
<b>DATE COMPLETED</b>	06/06/2024

**B.1 OPERATIONS**

Legend: C-Competent, NME-Need More Exposure

Document No.	PLAN FOR WELL SERVICES OPERATIONS	Assessment / Verification	Competency	Assessment
			C	NME

FORM B 1.1	PLAN OPERATIONAL REQUIREMENTS				
	<u>CALCULATION &amp; CONVERSION</u>				
	1. Convert to Decimal number <ul style="list-style-type: none"> <li>i. <math>15/16"</math> - 0.9375 inch</li> <li>ii. <math>1 \frac{1}{16}"</math> - 1.0625 inch</li> </ul>	Good	✓		10/06/24
	2. a) What is the conversion factor for the following <ul style="list-style-type: none"> <li>i. 1 Meter = 3.28 feet</li> <li>ii. 1 PSI = 6.894 kpa</li> <li>iii. 1 Degree Centigrade = 33.8 Fahrenheit</li> </ul> b) Base on your answer above (No 2), fill in the blank: <ul style="list-style-type: none"> <li>i. <math>14 - \frac{3}{4}"</math> = 0.375 meter</li> <li>ii. 560 Bar = 56000 kpa</li> <li>iii. 450 F = 232.222 C</li> </ul>	Good	✓	10/06/24	

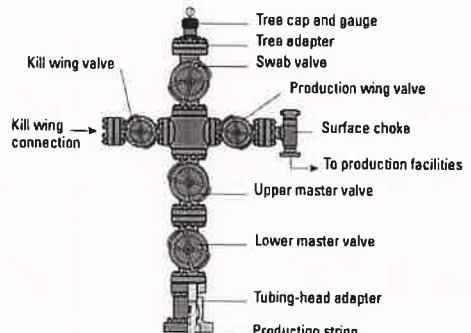
	3. Show how you utilize Gauge Vernier Caliper to measure OD or ID					
	 Internal diameter picture  Outer diameter picture		Good	✓		10/06/24

	<p>4. a) How many lbs/foot weight for the following wireline tools?</p> <ol style="list-style-type: none"> <li>1 7/8 " Stem = 9.4 lbs/foot</li> <li>1 1/2 " Stem = 6.0 lbs/foot</li> <li>1 1/4 " Stem = 4.2 lbs/foot</li> </ol> <p>b) Base on answer above, what is the weight for the following wireline tools</p> <ol style="list-style-type: none"> <li>1 -7/8" x 5' Stem = 47 lbs</li> <li>1 1/2 " x 3' Stem = 18 lbs</li> <li>1 1/4 " x 2' Stem = 8.4 lbs</li> <li>2 1/2 " x 2' Stem = 33.4 lbs</li> </ol>			
	<p>5. Calculate how to get the answer for the following question</p> <ol style="list-style-type: none"> <li><math>1 - 1/6" \times 0.125" = 0.14575</math> inch (in decimal number)</li> <li>if <math>5x = 67</math>, x equal to</li> </ol>	Good	✓	10/06/24
		Good	✓	10/06/24

	<p>6. Refer to the data below, what is the average hour/week employee at company A working?</p> <table> <tbody> <tr> <td>Sunday</td> <td>- 14 hours</td> </tr> <tr> <td>Monday</td> <td>- 12 hours</td> </tr> <tr> <td>Tuesday</td> <td>- 10 hours</td> </tr> <tr> <td>Wednesday</td> <td>- 16 hours</td> </tr> <tr> <td>Friday</td> <td>- 0 hour</td> </tr> <tr> <td>Saturday</td> <td>- 8 hours</td> </tr> </tbody> </table> <p>Answer: 8.571 hour/week</p>	Sunday	- 14 hours	Monday	- 12 hours	Tuesday	- 10 hours	Wednesday	- 16 hours	Friday	- 0 hour	Saturday	- 8 hours	<p>Grad</p>	<input checked="" type="checkbox"/>	10/06/29
Sunday	- 14 hours															
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Friday	- 0 hour															
Saturday	- 8 hours															
	<p>7. Write down the formula how to calculate for following items:</p> <ol style="list-style-type: none"> <li>Square Area - <math>A=a^2</math></li> <li>Volume for square box and cylinder - <math>V = \pi R^2</math> (volume for cylinder)  <math>V = a^2 h</math> ( volume for square box)</li> <li>Pressure - <math>P = FA</math></li> <li>Force - <math>F = ma</math></li> </ol>	<p>Grad</p>	<input checked="" type="checkbox"/>	10/06/29												
	<p>8. Which is equal to 0.75?</p> <ol style="list-style-type: none"> <li><math>\frac{3}{4}</math> (equal to 0.75)</li> <li><math>24/32</math></li> <li><math>5/8</math></li> <li><math>10/16</math></li> <li><math>36/48</math></li> </ol>	<p>Grad</p>	<input checked="" type="checkbox"/>	10/06/29												

FORM B 1.1	PLAN OPERATIONAL REQUIREMENTS			
1.	What is a 'PTW'? Are you aware a procedure on 'PTW' is in place? Name / Procedure Number / Locate Procedure Permit to work. Yes I am aware	Good	✓	10/08/24
2.	Why do we need one for any wireline activity to take place on an offshore installation? Its used to ensure that work is done safely and efficiently.	Good	✓	10/06/24
3.	Explain the general process in applying for a permit-to-work for a wireline operation to take place.	Good	✓	10/06/24
4.	In the process of planning out an operation, you found out that some materials or special tools are not available on site. What will be your next course of action? Inform to SUPERVISOR and request from town.	Good	✓	10/06/24
5.	Explain how you perform Pre & Post Job Check (Use Pre & Post Job Checklist) Check all equipment and operation need before go to offshore and after return to the base.	Good	✓	10/06/24
6.	When do you need to attend Briefing and De-briefing? Before go to offshore and after return to offshore.  What is the benefit of this session? To share information about the job before go to offshore and share any finding or improvement when return to the base.	Good	✓	10/06/24

	<p>7. List down 5 important documents you need to bring offshore and why? -</p> <ol style="list-style-type: none"> <li>1. Inventory ( so we know what tool we bring to offshore)</li> <li>2. Sign program ( as a job program )</li> <li>3. Daily check list ( to check and maintain equipment performance)</li> <li>4. CSS ( to check client satisfactory )</li> <li>5. TMS ( to check and monitor how many day crew at offshore)</li> </ol>	Good	✓	10/06/24
	<p>8. Explain your preparation before going offshore</p> <ul style="list-style-type: none"> <li>* Prepare all tool and equipment before go to offshore.</li> <li>* perform acceptance with client.</li> <li>* perform pre mob briefing with FSM before go to offshore.</li> </ul>	Good	✓	10/06/24
	<p>9. Describe your tasks upon arrival at the platform</p> <ul style="list-style-type: none"> <li>* Attend safety induction conduct by safety officer.</li> <li>* Discuss with client (supervisor) about job want to perform.</li> </ul>	Good	✓	10/06/24
	<p>10. List down tool string configuration prior to carry-out the following jobs:</p> <ol style="list-style-type: none"> <li>i. Tubing clearance Rope socket + swivel joint + normal stem + knuckle joint + spank jar + x over + gauge ring.</li> <li>ii. Sinker Bar Rope socket + swivel joint + normal stem + knuckle joint + spank jar + x over + 2" normal stem.</li> </ol>	Good	✓	10/06/24

	<p>11. Describe what the following terms mean:</p> <ol style="list-style-type: none"> <li>Insert Valve – if the SCSSV broken need to install insert valve.</li> <li>TRSCSSV – tubing retriever safety control sub safety valve.</li> <li>RIH – run in hole</li> <li>POOH – pool out of hole</li> </ol>			<i>Good</i> 10/06/24
	<p>12. Draw the X-Mass Tree. Describe what is the function</p> 			<i>Good</i> 10/06/24
	<p>13. What is the valve fitted at X Mass Tree? Which is the valve is always utilize during wireline operation?</p> <ul style="list-style-type: none"> <li>* swab valve</li> <li>* hydraulic master valve</li> <li>* lower master valve</li> </ul>			<i>Good</i> 10/06/24

	<p>14. How many turns to close the Master Valve for the following x-Mass Tree:</p> <ol style="list-style-type: none"> <li>WKM – 18-1/2 turns</li> <li>Ingram Cactus – 18-1/2 turns</li> <li>Mcevoy – 18-1/2 turns</li> </ol>	Good	✓	10/06/24
	<p>15. Why is it compulsory to count when closing the Master Valve To double confirm the valve was properly closed.</p>	Good	✓	10/06/24
	<p>16. Describe the process of installing pressure manifold at X-Mass Tree Tubing Hanger. N/A</p>	Good	✓	10/06/24
	<p>17. Describe the process prior to RIH and POOH tools string (example- to change wireline tools)</p> <ul style="list-style-type: none"> <li>* Rig up PCE on well.</li> <li>* Hookup toolstring inside lubricator section.</li> <li>* Zero toolstring to tubing hanger.</li> <li>* Pressure test PCE (as per program)</li> <li>* Equalise well. (make sure SV, HMV and LV fully open)</li> <li>* RIH toolstring to desired depth.</li> <li>* POOH after conduct the job.</li> <li>* Close SV and HMV.</li> <li>* Bleed off pressure above SV.</li> <li>* Open QTS and change wireline tool.</li> </ul>	Good	✓	10/06/24
	<p>18. Where to ZERO tool string prior RIH Tubing Hanger</p>	Good	✓	10/06/24

	<p>19. Why it is compulsory to carry-out pressure test upon completion of rig-up? Describe the process To check any leaks at PCE connection.</p> <ul style="list-style-type: none"><li>* Rigup full PCE on well.</li><li>* Hook up test pump to manifold at PCE stack up. ( manifold at LTV area)</li><li>* Hook up charted recorder to test pump.</li><li>* Fill up water into PCE stack up. (make sure xmass tree valve closed)</li><li>* Pressure test PCE stack up once water full as per program.</li><li>* Check any visual leaks and check at chart recorder.</li><li>* Once complete bleed off pressure from test pump.</li></ul>	<i>Good</i>	<input checked="" type="checkbox"/>	10/06/24
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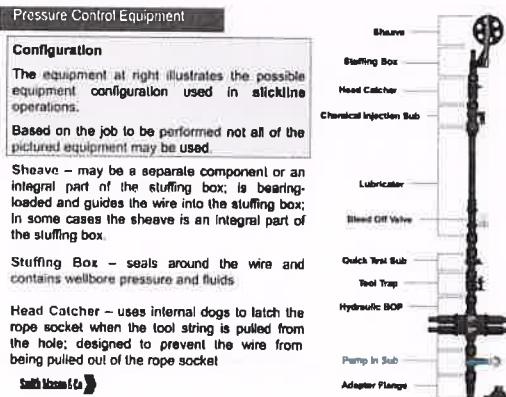
	<p>20. a) What is the breaking strength for the following wire?</p> <ul style="list-style-type: none"><li>i. 0.092" EIPS – 1830 lbs</li><li>ii. 0.108" EIPS – 2490 lbs</li><li>iii. 0.125" EIPS – 3300 lbs</li></ul> <p>b) Describe the type and size of wireline utilize in Dimension Bid</p> <ul style="list-style-type: none"><li>1. ZERON 0.108"</li><li>2. ZERON 0.125"</li><li>3. ZERON 0.140"</li><li>4. ZERON 0.160"</li><li>5. BRAIDED 7/32"</li></ul> <p>c) What is the equipment to be used to carry out twist test? Show how to use it</p> <p>BRAIDED WIRE – 7/32"</p> <p>d) Describe the maintenance required for the wire</p> <p>Wire should be maintained with periodical lubrication. In order to prevent internal corrosion a pressure lubricator is suggested to be used.</p>				
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	<p>21. Show standard "HAND SIGNAL" for the following task:</p> <ol style="list-style-type: none"> <li>Close the CV,MV and TRSCSSV Use head to signal crew when to open and close CV. Use tummy to signal crew when to open and close MV.</li> <li>For crane – Boom Up, Boom Down, Picking-up, Slack-off, Swing to right/left</li> </ol> <div data-bbox="431 495 1028 813"> </div>	<p>Good</p>	<p>✓</p>	<p>10/06/20</p>
	<p>22. Describe the topic discussed in Pre-Job Safety Meeting</p> <ul style="list-style-type: none"> <li>* Discuss objective of job to conduct</li> <li>* Discuss about equipment preparation and inspection.</li> <li>* Discuss about job paperwork and reporting.</li> <li>* Discuss about personnel and competency.</li> </ul>	<p>Good</p>	<p>✓</p>	<p>10/06/20</p>
<b>FORM B 1.2</b>	<b>SELECT AND TEST WELL SERVICES EQUIPMENT</b>			

	<p>1. List the specific surface equipment needed for carrying out wireline work using 0.092"/0.108"/0.125".</p> <ul style="list-style-type: none"> <li>* RSU</li> <li>* POWER PACK</li> <li>* WIRELINE MAST</li> </ul>	Good	✓	10/06/24
	<p>2. Tabulate the standard toolstring for use in carrying out routine wireline operation.</p> <ul style="list-style-type: none"> <li>* ROPE SOCKET</li> <li>* SWIVEL JOINT</li> <li>* NORMAL STEM</li> <li>* KNUCKLE JOINT</li> <li>* SPANK JAR</li> <li>* X OVER</li> <li>* RUNNING TOOL / PULLING TOOL</li> </ul>	Good	✓	10/06/24
	<p>3. Describe the procedure for checking the pulling and running tools for:-</p> <ol style="list-style-type: none"> <li>i. WR-SCSSV. – Key type, size, flapper type, length, OD</li> <li>ii. KOT – Check thread connection, check pin, check spring condition. Check trigger Key, check fishing neck.</li> <li>iii. GA-2 – Check thread, check core</li> <li>iv. 1.1/4" JDC – Check thread connection, check spring, check dog, check skirt.</li> </ol>	Good	✓	10/06/24

	4. What is the minimum breaking load of: i. Bridon UHT wire 0.092" - 1545 lbs ii. Bridon UHT wire 0.108" - 2110 lbs iii. Bridon UHT wire 0.125" - 2830 lbs iv. 3/16" Galvanised Dyform wire – 55.2 Kn v. Supa 70 wire size 0.108" - 1550 lbs vi. Supa 75 wire size 0.108" - 2129 lbs	Good	✓	10/06/24
	5. What is the recommended minimum sheave size for: i. 0.092" – 16" ii. 0.108" – 17" iii. 0.125" – 18" iv. 3/16" – 22"	Good	✓	10/06/24
	Rule of thumb: 100 times the Outside Diameter			
	6. Why is it important to check and clean the flame trap on the unit? * To prevent from temperature increase. * To prevent from shut down suddenly.	Good	✓	10/06/24
	7. Why is it necessary to carry out torsion test or wrap test (as appropriate) on the wireline prior to a well entry work? * to check wire condition. * to evident the wire breaking point as per document	Good	✓	10/06/24
	8. What is the recommended distance separating the cell plates of the 0-2000 lbs range Martin Decker load cell assembly? * 0.250"	Good	✓	10/06/24

Form B 1.3	<p>9. Why do we need to maintain a minimum distance between the cell's plate and state what could happen if this distance is not maintain during the jarring operation?        * weight reading will be not accurate.</p>	<i>Good</i>	<input checked="" type="checkbox"/>	<i>10/06/24</i>
	<p>10. Produce a checklist for the wireline reel skid prior to start-up        * Daily checklist fot RSU</p>	<i>Good</i>	<input checked="" type="checkbox"/>	<i>10/06/24</i>
	<p><b>RIG UP WELL SERVICES EQUIPMENT</b></p> <p>1. Who authorizes and approves the PTW for Well Services activities?</p> <p>i. (SIMOPS/SIPROD) Simultaneous Drilling &amp; Production Operations mode –        * DISCIPLINE SUPERVISOR        * PERSON IN CHARGE        * AREA AUTHORITY        * PERFORMING AUTHORITY        * PRODUCTION SUPERVISOR</p> <p>ii. Routine operations on a production platform –        * DISCIPLINE SUPERVISOR        * PERSON IN CHARGE        * AREA AUTHORITY        * PERFORMING AUTHORITY        * PRODUCTION SUPERVISOR</p>	<i>Good</i>	<input checked="" type="checkbox"/>	<i>10/06/24</i>

	<p>2. Why is it important to have a pre-job briefing/discussion before rigging up?</p> <ul style="list-style-type: none"> <li>* to discuss safety way to perform the job.</li> <li>* to highlight any precaution need to aware.</li> </ul>	Good	✓	10/06/24
	<p>3. What pre-checks are required prior to rigging up Well Services surface equipment?</p> <ul style="list-style-type: none"> <li>* check water level</li> <li>* check diesel</li> <li>* check engine oil</li> <li>* check radiator coolant</li> <li>* check hydraulic</li> <li>* check starter condition</li> <li>* check fan belt</li> <li>* check compressor oil</li> <li>* check grounding cable</li> </ul>	Good	✓	10/06/24
	<p>4. List down a standard lubricator configuration. Describe the sequence of assembling the lubricator followed by safe rigging up process.</p> 	Good	✓	10/06/24
	<p>5. Explain why is it important to position the BOP correctly?</p> <ul style="list-style-type: none"> <li>* its easy to see indicator from the unit.</li> <li>* its easy to install hydraulic hose</li> </ul>	Good	✓	10/06/24

	6. What is the acceptable gap range on the weight indicator load cell during zero check? 1/4"	Good	✓	10/06/24
	7. Wire running through the hay pulley of the weight indicator should be at what angle? * As closed to 90 deg	Good	✓	10/06/24
	8. Wire running through the hay pulley of the weight indicator should be at what angle? * As closed to 90 deg	Good	✓	10/06/24
	9. Why is it important? * To make sure reading for the tool weight is right.	Good	✓	10/06/24
	10. Give two reasons why you need to rig up the hay pulley correctly? * To prevent wire from slip from the hay pulley.	Good	✓	10/06/24

11. Describe the process of BOP function and pressure testing for 0.092"/0.108" slick wire after rigging-up. Your answer should include how equalizing pressure across the closed BOP is done prior to opening the BOP rams. Under what circumstances do you need to operate the BOP?

Procedures For Use

**Equalising** All BOP's have a means of equalising the pressure below the closed rams with the pressure above. A pressure differential acting on the cross-section of the rams creates a force that makes opening the rams extremely difficult. Attempting to open the rams without equalising may result in internal damage.

Always check that the equalising assembly is correctly\* installed. The allen screw should be on the high pressure side of the rams, i.e. downwards.

\* Some older designs allowed the equalising assembly to be installed upside down, which could prevent equalising and cause the BOP to be inverted.

Keep the equalising valve closed so that in an emergency the BOP will hold pressure as soon as the rams are closed. If this valve is in the 'open' position, it will have to be closed manually before the well pressure will be contained. The additional time required may be critical in an emergency.

**Testing** Remember the BOP is a safety device for use in an emergency, and it is the responsibility of the operator to ensure that it is in perfect working order at all times.

All types of BOP's should be tested in the workshop on a regular basis to be determined to suit field conditions.

With the rams open - Pressure to 150% of the working pressure.

With the rams closed - Pressure to 100% of the working pressure to test the ram seal against the wire diameter. A test rod" of the same size as the wire to be used should be inserted between the rams.

\* **Caution :** Ensure the rod has an enlarged diameter below the ram to prevent it being blown out during testing.

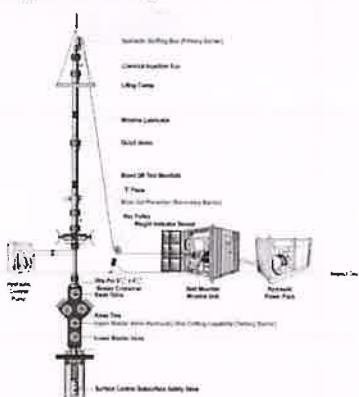
GWD

✓

10/06/2017

	<p>A wireline BOP (also known as a wireline valve) is installed between the tree connection and lower lubricator section.* Under normal working circumstances it is not actually used, but it cannot be installed later with wire in the hole and pressure in the lubricator. It must be included in all rig ups.</p> <p>* The only exceptions to the BOP being next to the tree connection are:</p> <ol style="list-style-type: none"> <li>When installing / retrieving BPV's (Back Pressure Valves) and there is a possibility of the toolstring remaining across the Xmas tree valves, the BOP's can then be mounted above the lower lubricator section. Check that this provides sufficient length to close the rams on the wire, i.e. above the rope socket.</li> <li>When running / pulling an SCSSV or a wireline retrievable BPV, the BOP can be positioned above the first section of the lubricator. Alternatively, a second BOP can be placed immediately below the stuffing box. This provides a means of isolating the well pressure and recovering the tools if the wire breaks at the rope socket and the tools drop across the Xmas tree valves.</li> </ol> <p><u>Purpose</u></p> <ul style="list-style-type: none"> <li>To enable the well pressure to be isolated without cutting the wire by closing the master valve.</li> <li>To permit the assembly of the wireline cutter above the BOP rams.</li> <li>To permit the dropping of a wireline cutter if the toolstring becomes stuck in the well.</li> <li>To permit 'stripping' of the wire through closed rams, only when necessary.</li> </ul>			
	<p>12. With respect to wind direction, where do you position the wireline power pack in relation to the wireline winch? Why?</p> <p>* Opposite the wind direction.    * To prevent the smoke coming inside the winch.</p>	Good	✓	10/06/24
	<p>13. Why is it necessary to tie down the wireline winch after rigging-up?</p> <p>* To make sure the winch is secure properly and to prevent form any movement while hard jarring.</p>	Good	✓	10/06/24

	<p>14. Why is it important to report remedial action taken on faulty equipment?</p> <ul style="list-style-type: none"> <li>* to make sure crew can continue the work smoothly.</li> <li>* to make sure the problem can be solve as soon as possible.</li> <li>* to make sure client know what happen to the equipment.</li> </ul>	Good	✓		10/06/20
	<p>15. How would you deal with defective equipment that is beyond repair on site?</p> <ul style="list-style-type: none"> <li>* Raise MR and change with other equipment.</li> </ul>	Good	✓		10/06/20
	<p>16. List down all Surface Equipment &amp; Pressure Equipment required for rigging-up</p> <ul style="list-style-type: none"> <li>* RSU</li> <li>* POWER PACK</li> <li>* WIRELINE MAST</li> <li>* CONTROL PANEL</li> <li>* TEST PUMP</li> <li>* INTISIFIER TANK</li> <li>*LUBRICATOR SECTION.</li> </ul>	Good	✓		10/06/20

	<p>17. Draw lay-out for item (16) and name each equipment</p> <p>SLICKLINE UNIT</p> <p><b>Features</b></p> <ul style="list-style-type: none"> <li>✓ Perform downhole intervention under pressure with solid wire,</li> <li>✓ No circulation capability</li> <li>✓ No rotation capability</li> <li>✓ Unable to work in horizontal section of a well</li> <li>✓ The lowest pulling capacity well Intervention unit</li> </ul> <p><b>Main equipment</b></p> <ul style="list-style-type: none"> <li>✓ Power pack,</li> <li>✓ Winch unit,</li> <li>✓ Pressure Control Equipment           <ul style="list-style-type: none"> <li>- Tree adapter</li> <li>- Pumping unit</li> <li>- Blow out preventer</li> <li>- Lines</li> <li>- Stabilizing box</li> </ul> </li> <li>✓ Pumping unit and tank</li> </ul> <p><b>Main job</b></p> <ul style="list-style-type: none"> <li>✓ Downhole safety valve maintenance</li> <li>✓ Check tubing drill</li> <li>✓ Zone Change</li> <li>✓ Gas lift installation</li> <li>✓ Sand bailing</li> <li>✓ Fishing</li> </ul> 			
	<p>18. Who would you seek advice and support with respect to :</p> <p>FSM</p>	Good	✓	10/06/24
	<p>19. Describe the process and safety pre-caution to be taken when opening Tree Cap Adaptor prior to rig-up</p> <ul style="list-style-type: none"> <li>* Make sure no trap pressure before open xmass tree cap.</li> <li>* Use proper hand tool while open the tree cap collar.</li> <li>* Use crane to bring down xmass tree cap from the well after opened.</li> </ul>	Good	✓	10/06/24
Form B 1.4	<b>RIG DOWN WELL SERVICES EQUIPMENT AND HAND BACK WELL</b>			

	<p>1. What are the pre-check and sequence for safe rigging-down of lubricator?</p> <ul style="list-style-type: none"> <li>* Make sure no trap pressure inside lubricator section.</li> <li>* Use proper hand glove while handling lubricator connection.</li> <li>* Use certified sling while lifting up lubricator.</li> </ul>	Good	✓	10/06/24
	<p>2. What would you do to ensure the wellhead area is clear before rigging-down?</p> <ul style="list-style-type: none"> <li>* Make sure to barricade the wellhead area.</li> <li>* make sure 1 standby person at wellhead area while rigging down the equipment.</li> </ul>	Good	✓	10/06/24
	<p>3. Explain why is it important to report any defective equipment and remedial action taken?</p> <ul style="list-style-type: none"> <li>* to make sure crew can continue the work smoothly.</li> <li>* to make sure the problem can be solve as soon as possible.</li> <li>* to make sure client know what happen to the equipment.</li> </ul>	Good	✓	10/06/24
	<p>4. It is necessary to hand back well to the frontline personnel to open up well as soon as possible after rigging-down. However, you may sometimes be requested to open up on their behalf. Why is it important to inform the frontline personnel before you open up the well?</p> <ul style="list-style-type: none"> <li>* to make sure the well back online without any problem.</li> <li>* to double confirm to open the right valve.</li> <li>* to make sure control room know you want to back online the well.</li> </ul>	Good	✓	10/06/24

	<p>5. How is the daily wireline operation report done in your area? Who need access to the report? For what purpose?</p> <ul style="list-style-type: none"> <li>* After finish the work need to make a report daily.</li> <li>* The report send to FSM for any improvement and discussion.</li> </ul>	Good	✓	10/06/24
	<p>6. Under what circumstances that you have to rig-down the lubricator even though the job is not completed. Consider both oil and gas operations when answering.</p> <ul style="list-style-type: none"> <li>* When the xmass tree valve was leaked.</li> <li>* When job was canceled and instruction from town to skip the well.</li> </ul>	Good	✓	10/06/24

Form B 1.5	DEMobilise and store well services equipment			
	<p>1. How would you prepare the following for:</p> <p>i ) backloading and</p> <ul style="list-style-type: none"> <li>* Check equipment condition.</li> <li>* Check tagline.</li> <li>* Check 4 legged sling.</li> <li>* Check any loose item to prevent drop object.</li> </ul> <p>ii ) storage on site :</p> <ul style="list-style-type: none"> <li>* Secure all loose item.</li> <li>* secure tagline and sling. (to prevent missing)</li> <li>* lock all door and secure.</li> </ul>	Good	✓	10/06/24

	<p>2. What are the pre-checks required for backloading with respect to lifting equipment, platform crane, sea and weather conditions?</p> <table border="1"> <thead> <tr> <th>Equipment</th><th>Backloading</th><th>Storage on site</th></tr> </thead> <tbody> <tr> <td>Wireline units</td><td>Check sling</td><td>Secure door</td></tr> <tr> <td></td><td>Check tag line</td><td>Secure loose item</td></tr> <tr> <td>Lubricators</td><td>Put inside lubricator</td><td>Secure properly.</td></tr> <tr> <td></td><td>Rack.</td><td></td></tr> <tr> <td>Wireline tools</td><td>Put inside dog house</td><td>Put at proper place</td></tr> <tr> <td></td><td></td><td></td></tr> </tbody> </table>	Equipment	Backloading	Storage on site	Wireline units	Check sling	Secure door		Check tag line	Secure loose item	Lubricators	Put inside lubricator	Secure properly.		Rack.		Wireline tools	Put inside dog house	Put at proper place						
Equipment	Backloading	Storage on site																							
Wireline units	Check sling	Secure door																							
	Check tag line	Secure loose item																							
Lubricators	Put inside lubricator	Secure properly.																							
	Rack.																								
Wireline tools	Put inside dog house	Put at proper place																							
	Good	✓	10/06/24																						
<p>3. Explain why good housekeeping is necessary with respect to proper equipment storage.</p> <p>* its easy to find anything if good house keeping is performing.</p>	Good	✓	10/06/24																						
<p>4. Why is it important to check equipment condition and update the equipment inventory for different locations regularly?</p> <p>* to check any damage or any missing part at equipment while transfer to other location.</p>	Good	✓	10/06/24																						
<p>5. What is the essential information to be included on the consignment note for equipment returned to shore</p> <p>* Name of equipment   * Size   * Weight</p>	Good	✓	10/06/24																						

	<p>6. For Third party equipment, what are the precautions to take during backloading and/or handling of hazardous materials?</p> <p>* Ask the third party to give SOP to handling their materials.</p>	Good	<input checked="" type="checkbox"/>	10/06/24
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Assessed By:		Verified By:	
Name	Sahrizan Bin Sapari	Name	AFIQ AIMAN BIN HASSAN
Position	SGSO	Position	Field Service Manager DIMENSION BID (M) SDN BHD
Date	10   06   2024	Date	10/06/24



# **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.

<b>NAME</b>	<b>MOHD YANI BIN MOHD AZMI</b>
<b>DATE OF JOIN</b>	<b>DECEMBER 2012</b>
<b>CONTACT NO.</b>	<b>011-39109091</b>
<b>RECEIVED DATE</b>	
<b>DATE COMPLETED</b>	<b>26 JUNE 2024</b>

**B.1 OPERATIONS**

Document No.	PLAN FOR WELL SERVICES OPERATIONS	Assessment / Verification		
		Competency	NME	Assessment Date
FORM B 1.1	<b>PLAN OPERATIONAL REQUIREMENTS</b> <u>CALCULATION &amp; CONVERSION</u> 1. Convert to Decimal number i. $15/16''$ - 0.9375 inch ii. $1 \frac{1}{16}''$ - 1.0625 inch  2. a) What is the conversion factor for the following i. 1 Meter = 3.28 feet ii. 1 PSI = 6.894 kpa  iii. 1 Degree Centigrade = 33.8 Fahrenheit  b) Base on your answer above (No 2), fill in the blank: i. $14 - \frac{3}{4}''$ = 0.375 meter ii. 560 Bar = 56000 kpa iii. 450 F = 232.222 C		✓	10/07

Legend: C-Competent, NME-Need More Exposure

10/07

✓



### Outer diameter picture



Internal diameter picture

10/10

1

<p>4. a) How many lbs/foot weight for the following wireline tools?</p> <p>i. <math>1\frac{7}{8}</math> " Stem = 9.4 lbs/foot  ii. <math>1\frac{3}{8}</math> " Stem = 6.0 lbs/foot  iii. <math>1\frac{1}{4}</math> " Stem = 4.2 lbs/foot</p> <p>b) Base on answer above, what is the weight for the following wireline tools</p> <p>i. <math>1\frac{7}{8}</math> " x 5' Stem = 47 lbs ✓ 10/10  ii. <math>1\frac{1}{2}</math> " x 3' Stem = 18 lbs  iii. <math>1\frac{1}{4}</math> " x 2' Stem = 8.4 lbs  iv. <math>2\frac{1}{4}</math> " x 2' Stem = 33.4 lbs</p>	
<p>5. Calculate how to get the answer for the following question</p> <p>i. <math>1 - 1/6" \times 0.125" = 0.14575</math> inch (in decimal number)  ii. if <math>5x = 67</math>, x equal to 13.4 ✓ 10/10</p>	

	6. Refer to the data below, what is the average hour/week employee at company A working? Sunday - 14 hours Monday - 12 hours Tuesday - 10 hours Wednesday - 16 hours Friday - 0 hour Saturday - 8 hours	<input checked="" type="checkbox"/> <b>0/07</b>
	Answer: <b>8.571 hour/week</b>	
7.	Write down the formula how to calculate for following items:  i. Square Area - $A=a^2$  ii. Volume for square box and cylinder - $V = \pi R^2$ (volume for cylinder) $V = a^2 h$ ( volume for square box)  iii. Pressure - $P = FA$  iv. Force - $F = ma$	<input checked="" type="checkbox"/> <b>0/07</b>
8.	Which is equal to 0.75? i. $\frac{3}{4}$ (equal to 0.75) ii. $24/32$ iii. $5/8$ iv. $10/16$ v. $36/48$	<input checked="" type="checkbox"/> <b>0/07</b>

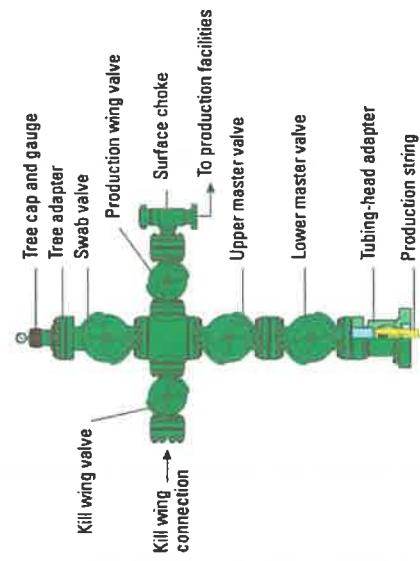
FORM B 1.1	PLAN OPERATIONAL REQUIREMENTS		
	ANSWER	MARK	GRADE
1. What is a 'PTW'? Are you aware a procedure on 'PTW' is in place? Name / Procedure Number / Locate Procedure  <b>* Permit to work. Yes I am aware</b>		✓	01/04
2. Why do we need one for any wireline activity to take place on an offshore installation?  <b>* The Permit to Work (PTW) system is crucial for wireline activities on offshore installations because it ensures the safety of personnel, prevents operational interference, ensures regulatory compliance, facilitates proper communication, prepares for emergencies, and protects the environment. By requiring a PTW, offshore installations can manage the risks associated with wireline operations more effectively, ensuring safe and efficient execution of these activities.</b>		✓	01/04
3. Explain the general process in applying for a permit-to-work for a wireline operation to take place.  <b>* Applying for a Permit to Work (PTW) for a wireline operation involves a structured process to ensure safety and compliance. This process includes planning and preparation, completing the PTW application, reviewing and approving the permit, conducting a pre-job safety meeting, executing the operation with all control measures in place, and finally, completing and closing out the PTW. Each step is designed to identify and mitigate risks, ensuring that the wireline operation is conducted safely and efficiently.</b>		✓	01/04

	<p>4. In the process of planning out an operation, you found out that some materials or special tools are not available on site. What will be your next course of action?</p> <p>* Inform to SUPERVISOR (WSS) and request from town.</p>		✓	✓
5.	<p>Explain how you perform Pre &amp; Post Job Check (Use Pre &amp; Post Job Checklist)</p> <p>* Performing Pre and Post Job Checks using checklists ensures thorough preparation and review for wireline operations. The pre-job check focuses on planning, equipment readiness, safety measures, and environmental checks, while the post-job check involves inspecting equipment, ensuring the work area is safe, documenting findings, and conducting a debriefing. This systematic approach helps identify and mitigate risks, ensuring safe and efficient wireline operations.</p>		✓	✓
6.	<p>When do you need to attend Briefing and De-briefing?</p> <p>* Before go to offshore and after return to offshore.</p>			✓

**What is the benefit of this session?**

- \* A pre-departure briefing before going offshore is essential for ensuring the safety, preparedness, and efficiency of offshore operations. It enhances safety awareness, operational readiness, effective communication, regulatory compliance, team building, problem-solving, time management, and continuous improvement. By conducting a thorough briefing, organizations can mitigate risks, ensure smooth operations, and foster a culture of safety and teamwork among offshore personnel.

7. List down 5 important documents you need to bring offshore and why?					
1. Inventory ( so we know what tool we bring to offshore) 2. Sign program ( as a job program) 3. Daily check list ( to check and maintain equipment performance) 4. CSS ( to check client satisfactory) 5. TMS ( to check and monitor how many day crew at offshore)					✓ 01/07
8. Explain your preparation before going offshore					
* Inspect Equipment and Tools: Check that all tools and equipment needed for the job are in good working condition, properly calibrated, and ready for use. * Pack Spares and Consumables: Ensure you have sufficient spare parts and consumables for the duration of the offshore operation. * perform acceptance with client. * perform pre mob briefing with FSM before go to offshore.				✓ 01/07	
9. Describe your tasks upon arrival at the platform					
* Upon arrival at an offshore platform, my tasks revolve around safety orientation, administrative procedures, PPE inspection.,, * Discuss with client (supervisor) about job want to perform.				✓ 01/07	

	<p>10. List down tool string configuration prior to carry-out the following jobs:</p> <ol style="list-style-type: none"> <li>Tubing clearance Rope socket + swivel joint + normal stem + knuckle joint + spank jar + x over + gauge ring.</li> <li>Sinker Bar Rope socket + swivel joint + normal stem + knuckle joint + spank jar + x over + 2" normal stem.</li> </ol>	<input checked="" type="checkbox"/> ✓ <b>10/10</b>
	<p>11. Describe what the following terms mean:</p> <ol style="list-style-type: none"> <li>Insert Valve – if the SCSSV broken need to install insert valve.</li> <li>TRSCSSV – tubing retriever safety control sub safety valve.</li> <li>RIH – run in hole</li> <li>POOH – pool out of hole</li> </ol>	<input checked="" type="checkbox"/> ✓ <b>10/10</b>
	<p>12. Draw the X-Mass Tree. Describe what is the function</p>	 <p>The diagram illustrates an X-Mass Tree, a specialized wellhead equipment. It features a central vertical column with a 'Kill wing connection' at the bottom. Above this, there is a 'Kill wing valve' and a 'Surface choke'. The tree is connected to 'Production wing valve' and 'Production string' lines. On the left side, there is a 'Tree cap and gauge' and a 'Tree adapter' with a 'Swab valve'. On the right side, there is an 'Upper master valve' and a 'Lower master valve'. A horizontal line labeled 'To production facilities' extends from the tree towards the right.</p>

13. What is the valve fitted at X-Mass Tree? Which is the valve is always utilize during wireline operation?	<ul style="list-style-type: none"> <li>* upper master valve</li> <li>* hydraulic master valve</li> <li>* lower master valve</li> </ul>	✓	0/10
14. How many turns to close the Master Valve for the following x-Mass Tree:			
i. WK/M – 18-1/2 turns ii. Ingram Cactus – 18-1/2 turns iii. McEvoy – 18-1/2 turns		✓	0/10
15. Why is it compulsory to count when closing the Master Valve	<ul style="list-style-type: none"> <li>* To double confirm the valve was properly closed.</li> </ul>	✓	0/10
16. Describe the process of installing pressure manifold at X-Mass Tree Tubing Hanger.	N/A		

	<p>17. Describe the process prior to RIH and POOH tools string (example- to change wireline tools)</p> <ul style="list-style-type: none"> <li>* Rig up PCE on well.</li> <li>* Hookup toolstring inside lubricator section.</li> <li>* Zero toolstring to tubing hanger.</li> <li>* Pressure test PCE (as per program)</li> <li>* Equalise well. (make sure SV, HMV and LV fully open)</li> <li>* RIH toolstring to desired depth.</li> <li>* POOH after conduct the job.</li> <li>* Close SV and HMV.</li> <li>* Bleed of pressure above SV.</li> <li>* Open QTS and change wireline tool.</li> </ul>	<p>01/07</p> <p>✓</p>	
	<p>18. Where to ZERO tool string prior RIH</p> <ul style="list-style-type: none"> <li>* Tubing Hanger</li> </ul>	<p>01/10</p> <p>✓</p>	

<p>19. Why it is compulsory to carry-out pressure test upon completion of rig-up? Describe the process To check any leaks at PCE connection.</p> <ul style="list-style-type: none"> <li>* Assemble Equipment: Ensure the lubricator, BOP, and associated components are assembled correctly and securely.</li> <li>* Close Valves: Close all valves on the lubricator and BOP stack to isolate the wellbore from the surface equipment.</li> <li>* Select Test Source: Use a test pump or generating the required test pressure and hookup to charted recorder.</li> <li>* Incremental Pressure Build-Up: Gradually increase the pressure in small increments, typically to 1.5 times the maximum anticipated surface pressure (MASP) or as specified in the operating procedures.</li> <li>* Hold Pressure: Maintain the test pressure for a specified duration (usually 5/10 minutes) to ensure the equipment can sustain pressure without significant pressure drop.</li> <li>* Monitor for Leaks: During the test period, closely monitor pressure gauges and visually inspect all connections, seals, and components for signs of leaks or abnormalities.</li> <li>* Record Results: Document the test pressure, duration, and any observations made during the test.</li> </ul> <p style="text-align: right;">✓</p> <p style="text-align: right;">01/07</p>
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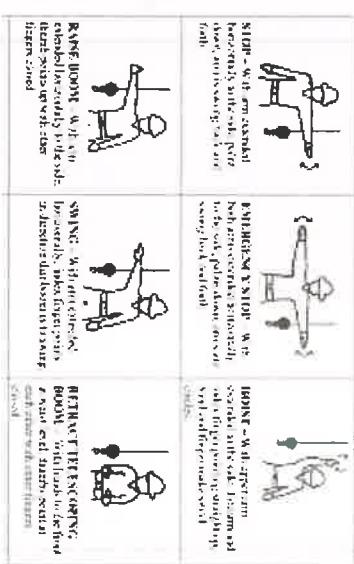
	<p>20. a) What is the breaking strength for the following wire?</p> <ul style="list-style-type: none"> <li>i. 0.092" EIPS – 1830 lbs</li> <li>ii. 0.108" EIPS – 2490 lbs</li> <li>iii. 0.125" EIPS – 3300 lbs</li> </ul> <p>b) Describe the type and size of wireline utilize in Dimension Bid</p> <ul style="list-style-type: none"> <li>1. ZERON 0.108"</li> <li>2. ZERON 0.125"</li> <li>3. ZERON 0.140"</li> <li>4. ZERON 0.160"</li> <li>5. BRAIDED 7/32"</li> </ul> <p>c) What is the equipment to be used to carry out twist test? Show how to use it</p> <p style="text-align: center;">* EIPS wire * Wire Twister Tester</p> <p>d) Describe the maintenance required for the wire</p> <p style="text-align: center;">* Remove Debris and Contaminants: Clean the wire rope regularly to remove dirt, mud, and other contaminants that can accelerate corrosion and wear. * Apply Lubricant: Apply a suitable wire rope lubricant to reduce friction between strands and protect against corrosion. Ensure lubrication reaches between strands and into the core of the wire rope.</p>
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21. Show standard "HAND SIGNAL" for the following task:

i. Close the CV,MV and TRSCSSV

Use head to signal crew when to open and close CV.  
 Use tummy to signal crew when to open and close MV.

ii. For crane – Boom Up, Boom Down, Picking-up, Slack-off, Swing to right/left



✓

01/04

22. Describe the topic discussed in Pre-Job Safety Meeting

- \* Detailed explanation of the tasks to be performed.
- \* Discussion of potential hazards associated with the job.
- \* Review of company safety policies and procedures.
- \* Specification of required PPE for the job.
- \* Location of emergency equipment (fire extinguishers, first aid kits, etc.) and evacuation routes and assembly points.
- \* Assignment of specific roles and responsibilities to team members.

✓

01/04

**FORM B.1.2 SELECT AND TEST WELL SERVICES EQUIPMENT**

<b>1. List the specific surface equipment needed for carrying out wireline work using 0.092"/0.108"/0.125'.</b> <b>* RSU / SLIMLINE UNIT</b> <b>* POWER PACK</b> <b>* WIRELINE MAST</b> <b>* INTENSIFIER TANK</b>		<input checked="" type="checkbox"/> <b>to/10</b>	
<b>2. Tabulate the standard toolstring for use in carrying out routine wireline operation.</b> <b>* ROPE SOCKET</b> <b>* SWIVEL JOINT</b> <b>* NORMAL STEM</b> <b>* KNUCKLE JOINT</b> <b>* SPANK JAR</b> <b>* X OVER</b> <b>* RUNNING TOOL / PULLING TOOL</b>		<input checked="" type="checkbox"/> <b>to/10</b>	
<b>3. Describe the procedure for checking the pulling and running tools for:-</b>		<b>i. WR-SCSSV. – Key type, size, flapper type, length, OD</b>  <b>ii. KOT – Check thread connection, check pin, check spring condition. Check trigger key, check fishing neck</b>  <b>iii. GA-2 – Check thread, check core</b>  <b>iv. 1.1/4" JDC – Check thread connection, check spring, check dog, check skirt.</b>	

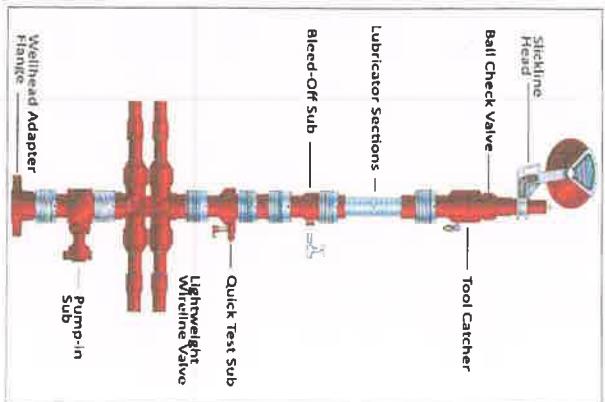
	4. What is the minimum breaking load of: i. Bridon UHT wire 0.092" - 1545 lbs ii. Bridon UHT wire 0.108" - 2110 lbs iii. Bridon UHT wire 0.125" - 2830 lbs iv. 3/16" Galvanised Dyform wire - 55.2 Kn v. Supa 70 wire size 0.108" - 1550 lbs vi. Supa 75 wire size 0.108" - 2129 lbs				
5.	What is the recommended minimum sheave size for: i. 0.092" - 16" ii. 0.108" - 17" iii. 0.125" - 18" iv. 3/16" - 22"				
	Rule of thumb: 100 times the Outside Diameter				
6.	Why is it important to check and clean the flame trap on the unit?  * Prevention of Explosions * Maintaining Proper Airflow * Ensuring Efficiency of unit				
7.	Why is it necessary to carry out torsion test or wrap test (as appropriate) on the wireline prior to a well entry work?  * The primary purpose of these tests is to ensure the wireline is in good condition and can handle the operational stresses. A failure during well entry operations can lead to serious accidents, posing significant risks to personnel and equipment. * The torsion test assesses the wireline's ability to withstand twisting forces, while the wrap test checks its flexibility and the integrity of its outer sheath. These tests help identify any weak spots, frays, or damage that could compromise the wireline during operation.				

8. What is the recommended distance separating the cell plates of the 0-2000 lbs range  * 0.250"		/		01/07
9. Why do we need to maintain a minimum distance between the cell's plate and state what could happen if this distance is not maintain during the jarring operation?  * The weight reading will be not accurate.		/		01/04
10. Produce a checklist for the wireline reel skid prior to start-up  * Perform gear test * Perform brake test * Check AA valve condition. * Check pressure wheel and counter wheel condition.		/		01/07

<b>Form B 1.3</b>	<b>RIG UP WELL SERVICES EQUIPMENT</b>
	<p>1. Who authorizes and approves the PTW for Well Services activities?</p> <p>i. (SIMOPS/SIPROD) Simultaneous Drilling &amp; Production Operations mode –</p> <ul style="list-style-type: none"> <li>* DISCIPLINE SUPERV (WSS)</li> <li>* PERSON IN CHARGE (DSV)</li> <li>* AREA AUTHORITY</li> <li>* PERFORMING AUTHORITY</li> <li>* PRODUCTION SUPERVISOR</li> </ul> <p>ii. Routine operations on a production platform –</p> <ul style="list-style-type: none"> <li>* DISCIPLINE SUPERV (WSS)</li> <li>* PERSON IN CHARGE (OIM)</li> <li>* AREA AUTHORITY</li> <li>* PERFORMING AUTHORITY</li> <li>* PRODUCTION SUPERVISOR</li> </ul> <p style="text-align: center;">✓</p> <p style="text-align: center;">01/09</p>

	<p>2. Why is it important to have a pre-job briefing/discussion before rigging up?</p> <ul style="list-style-type: none"> <li>* A pre-job briefing helps identify potential hazards and ensures that all team members are aware of the safety protocols. This reduces the risk of accidents and injuries during the rigging process.</li> <li>* The briefing ensures that everyone understands their specific roles and responsibilities. This coordination helps prevent confusion and mistakes, ensuring a smoother and more efficient operation.</li> <li>* Review procedure allows for a thorough review of the rigging procedures and protocols, ensuring that everyone is on the same page. This helps in maintaining consistency and adherence to best practices.</li> <li>* Potential risks and hazards can be discussed and mitigation strategies can be planned. This proactive approach helps in preventing incidents and ensuring a safer working environment.</li> </ul>	<p>✓</p> <p>01/07</p>
	<p>3. What pre-checks are required prior to rigging up Well Services surface equipment?</p> <ul style="list-style-type: none"> <li>* check water level</li> <li>* check diesel</li> <li>* check engine oil</li> <li>* check radiator coolant</li> <li>* check hydraulic</li> <li>* check starter condition</li> <li>* check fan belt</li> <li>* check compressor oil</li> <li>* check grounding cable</li> </ul>	<p>✓</p> <p>01/07</p>

4. List down a standard lubricator configuration. Describe the sequence of assembling the lubricator followed by safe rigging up process.



- \* Lay out the lubricator assembly components near the wellhead on the wireline for rigging up, following all necessary checks and field servicing as outlined in the steps above.
- \* Assemble the required number of sections above and below the BOP based on the wireline work to be performed, and hand-tighten all the quick unions.
- \* Assemble and insert the standard wireline toolstring, based on the first operation to be performed after rigging up, or insert a 5-foot stem through the upper box end of the lubricator assembly, leaving approximately 1 foot protruding.
- \* Run out sufficient wire and bring the stuffing box and wire attached with the rope socket to the top end of the lubricator, taking care not to bend or kink the wire at any time..
- \* Make up tight the rope socket to the protruding stem, then push the complete

01/07

✓

<p>toolstring down into the lubricator.</p> <ul style="list-style-type: none"> <li>* Pull the wire from the stuffing box sheave wheel end while simultaneously pushing the stuffing box pin end into the top box end of the lubricator. Ensure the wire between the rope socket and stuffing box remains taut. Once the connection is shouldered up, hand-tighten the quick union..</li> <li>* Pull the wire taut from the stuffing box along the length of the lubricator and secure it using a wireline clamp anchored to the body of the lowermost lubricator section.</li> <li>* Tie a length of 1/2" manila rope to the body of the stuffing box with a bowline knot to guy the stuffing box in the direction opposite to the pull of the wire.</li> </ul> <p>The lubricator assembly is now ready to be lifted for installation onto the Xmas tree.</p>	<p>✓</p>	<p>01/07</p>
<p>5. Explain why is it important to position the BOP correctly?</p>	<ul style="list-style-type: none"> <li>* Preventing Blowouts: The primary function of the BOP is to prevent blowouts by sealing the well in the event of uncontrolled pressure. Correct positioning ensures it can perform this function effectively, protecting personnel and equipment from potential explosions and fires.</li> <li>* Emergency Response: Proper positioning allows for quick and effective emergency responses. It ensures that the BOP can be activated without delays, which is critical in high-pressure situations to safeguard lives and the environment.</li> <li>* Tool Access: Proper placement ensures that tools and equipment can be safely and efficiently deployed through the BOP, facilitating smooth and uninterrupted operations.</li> </ul>	<p>✓</p>
<p>6. What is the acceptable gap range on the weight indicator load cell during zero check?</p>	<p><math>\frac{1}{4}''</math></p>	<p>✓</p>
<p>7. Wire running through the hay pulley of the weight indicator should be at what angle?</p> <ul style="list-style-type: none"> <li>* As closed to 90 deg</li> </ul>	<p>✓</p>	<p>✓</p>

	8. Wire running through the hay pulley of the weight indicator should be at what angle?  * As close to 90 deg	<input checked="" type="checkbox"/>	0/07
9.	Why is it important?	<input checked="" type="checkbox"/>	0/07
	* To make sure reading for the tool weight is right.	<input checked="" type="checkbox"/>	0/07

	10. Give two reasons why you need to rig up the hay pulley correctly?  * Proper rigging ensures the hay pulley can safely support the slickline tool string and associated equipment during operations. Secure attachment points and correct alignment minimize the risk of accidents such as line slippage, sudden drops, or entanglements.  * A correctly rigged hay pulley supports the smooth movement and operation of the slickline tool string. Proper alignment and tension distribution help prevent kinks or damage to the slickline, ensuring its integrity and functionality throughout the operation.	<input checked="" type="checkbox"/>	0/07
		<input checked="" type="checkbox"/>	0/07

	<p>11. Describe the process of BOP function and pressure testing for 0.092"/0.108" slick wire after rigging-up. Your answer should include how equalizing pressure across the closed BOP is done prior to opening the BOP rams. Under what circumstances do you need to operate the BOP?</p>	
<p><b>Procedures For Use</b></p> <p><b>Equalising</b></p> <p>All BOP's have a means of equalising the pressure below the closed rams with the pressure above. A pressure differential acting on the cross-section of the rams creates a force that makes opening the rams extremely difficult. Attempting to open the rams without equalising may result in internal damage.</p> <p>Always check that the equalising assembly is correctly* installed. The allen screw should be on the high pressure side of the rams, i.e. downwards.</p> <ul style="list-style-type: none"> <li>Some older designs allowed the equalising assembly to be installed upside down, which could prevent equalising and cause the BOP to be inverted.</li> </ul> <p>Keep the equalising valve closed so that in an emergency the BOP will hold pressure as soon as the rams are closed. If this valve is in the 'open' position, it will have to be closed manually before the well pressure will be contained. The additional time required may be critical in an emergency.</p> <p>Remember the BOP is a safety device for use in an emergency, and it is the responsibility of the operator to ensure that it is in perfect working order at all times.</p> <p><b>Testing</b></p> <p>All types of BOP's should be tested in the workshop on a regular basis to be determined to suit field conditions.</p> <p><b>With the rams open - Pressure to 150% of the working pressure.</b></p> <p>With the rams closed - Pressure to 100% of the working pressure to test the ram seal against the wire diameter. A test rod*, of the same size as the wire to be used should be inserted between the rams.</p> <p>* Caution : Ensure the rod has an enlarged diameter below the ram to prevent it being blown out during testing.</p>		

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✓

<p>12. With respect to wind direction, where do you position the wireline power pack in relation to the wireline winch? Why?</p> <ul style="list-style-type: none"> <li>* Opposite the wind direction.</li> <li>* To prevent the smoke coming inside the winch.</li> </ul> <p>13. Why is it necessary to tie down the wireline winch after rigging-up?</p> <ul style="list-style-type: none"> <li>* To make sure the winch is secure properly and to prevent form any movement while hand jarring.</li> </ul>	<p><b>Purpose</b></p> <p>(i) When installing / retrieving BOP's (Buck Pressure Valves) and there is a possibility of the toolstring remaining across the Xmas tree valves, the BOP's can then be mounted above the lower lubricator section. Check that this provides sufficient length in case the run in the wire, i.e. above the rope valve.</p> <p>(ii) When running / pulling an SCSV or a wireline retrievable BOP, the BOP can be positioned above the first section of the lubricator. Alternatively, a second BOP can be placed immediately below the stuffing box. This provides a means of isolating the well pressure and recovering the tools if the wire breaks at the rope valve and the tools drop across the Xmas tree valves.</p>
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	<p>14. Why is it important to report remedial action taken on faulty equipment?</p> <ul style="list-style-type: none"> <li>* By reporting and documenting remedial actions, you ensure that any faults or issues with equipment are promptly addressed. This helps maintain a safe working environment for personnel who interact with or rely on the equipment.</li> <li>* Reporting remedial actions helps demonstrate compliance with safety regulations and industry standards. It shows that the necessary steps were taken to rectify faults or deficiencies, ensuring legal and regulatory requirements are met.</li> </ul>	<input checked="" type="checkbox"/> to 10	
	<p>15. How would you deal with defective equipment that is beyond repair on site?</p> <ul style="list-style-type: none"> <li>* Raise MR and change with other equipment.</li> </ul>	<input checked="" type="checkbox"/> to 10	
	<p>16. List down all Surface Equipment &amp; Pressure Equipment required for rigging-up</p> <ul style="list-style-type: none"> <li>* RSU</li> <li>* POWER PACK</li> <li>* WIRELINE MAST</li> <li>* CONTROL PANEL</li> <li>* TEST PUMP</li> <li>* INTISIFIER TANK</li> <li>* LUBRICATOR SECTION.</li> <li>* BOP</li> </ul>	<input checked="" type="checkbox"/> to 10	

17. Draw lay-out for Item (16) and name each equipment

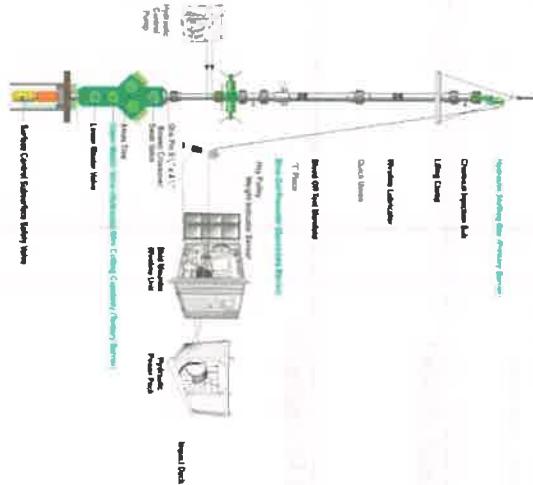
## SLICKLINE UNIT

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- perform downhole intervention under pressure with solid wire
- No circulation capability
- No rotation capability
- Unable to work in horizontal section of a well
- The lowest pulling capacity well intervention unit

Power Pack!

- Which unit, Pressure Control Equipment
- The adapter
- Pumping unit
- Dual pump
- Lubricator
- Buffering base
- Pumping unit and tank
- Main job
- Downhole safety valve maintenance
- Check rotating drift
- Zone Change
- Gas lift Irrigation
- Sand baiting
- Fishing



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18. Who would you seek advice and support with respect to:

\* FSM (Field Service Manager)

<p>19. Describe the process and safety pre-caution to be taken when opening Tree Cap Adaptor prior to rig-up</p>	<p>* Verify that the well is shut-in and that pressure control measures are in place to prevent uncontrolled release of well fluids or gases.</p> <p>* Continuously monitor well pressures to ensure they remain stable and within safe operating limits throughout the operation.</p> <p>* Ensure safe access to the tree cap assembly using appropriate platforms or scaffolding if necessary.</p> <p>* Using the correct tools (typically wrenches or chain tong), begin loosening the collar securing the tree cap. Follow a cross-pattern to evenly distribute pressure and prevent distortion or damage to the tree cap.</p> <p>* Once collar are sufficiently loosened, carefully lift and remove the tree cap from the wellhead assembly. Use caution to prevent sudden movements or drops.</p> <p style="text-align: right;">✓</p> <p style="text-align: right;">01/07</p>
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Form B 1.4	RIG DOWN WELL SERVICES EQUIPMENT AND HAND BACK WELL		
<p><b>1. What are the pre-check and sequence for safe rigging-down of lubricator?</b></p> <ul style="list-style-type: none"> <li>* Conduct a pre-job safety meeting to review the rigging-down procedure, potential hazards, and safety protocols with all involved personnel.</li> <li>* Assign roles and responsibilities, ensuring everyone understands their tasks and the overall plan.</li> <li>* Verify that all necessary tools and equipment for rigging down are available and in good working condition. This includes wrenches, lifting equipment, cleaning materials, and personal protective equipment (PPE).</li> <li>* Shut-in the well to ensure no pressure build-up or flow during the rigging-down process.</li> <li>* Establish clear communication channels among team members, including radios or hand signals, to facilitate safe coordination during rigging down.</li> <li>* If applicable, depressurize the lubricator and drain any fluids or residues to prevent spills or unexpected releases.</li> <li>* Carefully remove the slickline or wireline tool string from the lubricator, following safe handling practices to avoid damage or injury.</li> <li>* Using crane start laydown upper PCE section from the well and laydown at maindeck.</li> <li>* Rigdown PCE lower section one by one using the crane. Make sure hand placement in right position.</li> <li>* Install back xmas tree cap.</li> </ul>	<input checked="" type="checkbox"/>	01/07	
<p><b>2. What would you do to ensure the wellhead area is clear before rigging-down?</b></p> <ul style="list-style-type: none"> <li>* Make sure to barricade the wellhead area.</li> <li>* make sure 1 standby person at wellhead area while rigging down the equipment.</li> </ul>	<input checked="" type="checkbox"/>	01/07	

3. Explain why is it important to report any defective equipment and remedial action taken?	<ul style="list-style-type: none"> <li>* By reporting and documenting remedial actions, you ensure that any faults or issues with equipment are promptly addressed. This helps maintain a safe working environment for personnel who interact with or rely on the equipment.</li> <li>* Reporting remedial actions helps demonstrate compliance with safety regulations and industry standards. It shows that the necessary steps were taken to rectify faults or deficiencies, ensuring legal and regulatory requirements are met.</li> </ul>	✓	01/07
4. It is necessary to hand back well to the frontline personnel to open up well as soon as possible after rigging-down. However, you may sometimes be requested to open up on their behalf. Why is it important to inform the frontline personnel before you open up the well?	<ul style="list-style-type: none"> <li>* to make sure the well back online without any problem.</li> <li>* to double confirm to open the right valve.</li> <li>* to make sure control room know you want to back online the well.</li> </ul>	✓	01/07
5. How is the daily wireline operation report done in your area? Who need access to the report? For what purpose?	<ul style="list-style-type: none"> <li>* Every day. After finish the shift.</li> <li>* The report send to FSM for any improvement and discussion.</li> </ul>	✓	01/07

6.	<p>Under what circumstances that you have to rig-down the lubricator even though the job is not completed. Consider both oil and gas operations when answering.</p> <ul style="list-style-type: none"> <li>* If there is an emergency on-site, such as a sudden well control issue, equipment failure, or adverse weather conditions posing a safety risk, rigging down the lubricator may be necessary to evacuate personnel quickly and safely.</li> <li>* If there are unforeseen delays in operations unrelated to safety but impacting schedule adherence or resource availability, rigging down the lubricator temporarily suspends operations until the issue can be resolved.</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Form B 1.5	DEMOBILISE AND STORE WELL SERVICES EQUIPMENT
1.	<p>How would you prepare the following for:</p> <p>i ) backloading and</p> <ul style="list-style-type: none"> <li>* Check equipment condition.</li> <li>* Check tagline.</li> <li>* Check 4 legged sling.</li> <li>* Check any loose item to prevent drop object.</li> </ul> <p>ii ) storage on site :</p> <ul style="list-style-type: none"> <li>* Secure all loose item.</li> <li>* secure tagline and sling. (to prevent missing)</li> <li>* lock all door and secure.</li> </ul>

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	<p>2. What are the pre-checks required for backloading with respect to lifting equipment, platform crane, sea and weather conditions?</p>	<table border="1"> <thead> <tr> <th>Equipment</th><th>Backloading</th><th>Storage on site</th></tr> </thead> <tbody> <tr> <td>Wireline units</td><td>Check sling</td><td>Secure door</td></tr> <tr> <td></td><td>Check tag line</td><td>Secure loose item</td></tr> <tr> <td>Lubricators</td><td>Put inside lubricator</td><td>Secure properly.</td></tr> <tr> <td></td><td>Rack.</td><td></td></tr> <tr> <td>Wireline tools</td><td>Put inside dog house</td><td>Put at proper place</td></tr> <tr> <td></td><td></td><td></td></tr> </tbody> </table>	Equipment	Backloading	Storage on site	Wireline units	Check sling	Secure door		Check tag line	Secure loose item	Lubricators	Put inside lubricator	Secure properly.		Rack.		Wireline tools	Put inside dog house	Put at proper place				✓ 01/07
Equipment	Backloading	Storage on site																						
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Lubricators	Put inside lubricator	Secure properly.																						
	Rack.																							
Wireline tools	Put inside dog house	Put at proper place																						
	<p>3. Explain why good housekeeping is necessary with respect to proper equipment storage.</p>	<ul style="list-style-type: none"> <li>* Proper storage practices help prevent damage to equipment. This includes protecting equipment from environmental factors such as moisture, dust, extreme temperatures, and corrosive substances that can degrade materials over time.</li> <li>* Well-organized storage areas improve safety by reducing the risk of trips, falls, and accidents caused by clutter or improperly stored equipment. Clear pathways and storage layouts allow personnel to navigate the area safely and access equipment without obstruction.</li> </ul>	✓ 01/07																					
	<p>4. Why is it important to check equipment condition and update the equipment inventory for different locations regularly?</p>	<ul style="list-style-type: none"> <li>* to check any damage or any missing part at equipment while transfer to other location.</li> </ul>	✓ 01/07																					

<p>5. What is the essential information to be included on the consignment note for equipment returned to shore</p> <p>* Name of equipment        * Size        * Weight</p>		✓	01/07
<p>6. For Third party equipment, what are the precautions to take during backloading and/or handling of hazardous materials?</p> <p>* Ensure personnel involved in handling hazardous materials are properly trained in safe handling procedures, emergency response protocols, and the specific hazards associated with the materials being handled.</p> <p>* Wear appropriate PPE such as gloves, safety goggles, face shields, chemical-resistant clothing, and respiratory protection as required by the material safety data sheets (MSDS) and workplace safety regulations.</p> <p>* Maintain emergency response equipment such as spill kits, absorbents, fire extinguishers, and eyewash stations in accessible locations and ensure personnel are trained in their use</p> <p>* Communicate effectively with all personnel involved in the handling and backloading of hazardous materials. Use clear signage, verbal instructions, and/or written procedures to ensure understanding and compliance.</p>		✓	01/07
Assessed By:			
Verified By:			
Name	JAMES GEORGE WILSON SAMADONG		
Position	S60		
Date	01/07/2024		
Name	AFIQ AIMAN BIN HASSAN		
Position	Field Service Manager DIMENSION BID (M) SDN BHD		
Date	01/07/2024		