

EXERCISE WIRE LINE EQUIPMENT 4

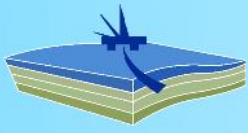
1. We are testing a Braided Line BOP on the Xmas tree using a Test Rod and Lubricator Pack-Off. Which barriers are required to be closed?
 - a) Master Valve, SSSV (not tested)
 - b) Swab Valve, BOP
 - c) Master, swab, Kill Wing & Flowing Valve
 - d) Swab Valve & Wing Valve

2. We have installed a Dual Ram BOP [with a bottom inverted ram] on the wellhead. We have no wire cutting valve on the Xmas tree. In order to achieve double barrier protection, what is considered correct?
 - a) Dual Ram BOP can be supported by a 2nd Dual Ram BOP, identical to the 1st Dual Ram BOP
 - b) Dual Ram BOP can be supported by a Shear/Seal BOP
 - c) Dual Ram BOP can be supported by a second Single Ram BOP
 - d) Dual Ram BOP already qualifies as a double barrier protection

3. Which of the following statements are correct when using BOP Shear Rams? (TWO ANSWERS)
 - a) They will not cut anything other than a single wire.
 - b) They will not cut any tool string nor any wireline tools.
 - c) They will not cut any tool strings, but only wireline tools.
 - d) They may cut as many as 8 to 10 conductor wires going through BOPs.

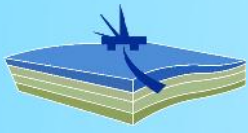
4. We are checking seals and sealing surfaces on the quick unions during a rig-up. Which of the following findings would disqualify the O-rings from being used? (THREE ANSWERS)
 - a) O-ring fits very tight
 - b) O-ring has a black color
 - c) O-ring is slack or oversized in groove
 - d) There is no back up O-ring
 - e) There are cuts and cracks on the O-ring
 - f) There is a smooth surface on the O-ring
 - g) The O-ring is flattened and has a worn surface
 - h) A thin line on the outside of O-ring





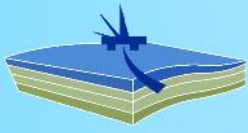
5. After setting a deep-set retrievable bridge plug, it was observed that the plug failed to hold the required pressure. What are the correct actions to take? (TWO ANSWERS)
- If the leak is small, then do nothing as this is, generally speaking, acceptable
 - Mobilize Coiled Tubing and place a cement plug on top of it
 - Pull the plug and replace it with a new plug
 - Mill the plug out and set a new plug
 - Set a back-up plug above the first plug
6. During a fishing job for a lost wireline plug in the well, it was observed that the line tension was 90% of max. permissible tension. You walk the line and notice a leak at the Hydraulic Stuffing Box. You attempt to pressure up on the Stuffing Box, but the in-line filter (which is a part of pump) appears to be blocked and we are unable to apply sufficient pressure. What should you do to bring the well back in safe condition?
- Remove in-line filter, pump up Packing of Stuffing Box, then release from the fish and POOH. Repair or replace Hydraulic Pump.
 - Close BOP. Advise OIM for the need to bullhead the well.
 - Remove in-line filter, pump up Packing of Stuffing Box and return to fishing
 - Do nothing as the wireline is under tension and once the tension decreases somewhat, then wireline will seal properly in the Stuffing Box.
7. We have pulled out of the well with wireline and the tool string is currently inside the lubricator. We have closed the Swab Valve and are in the process of performing an inflow test. What action should be taken if the Swab Valve fails this inflow test?
- Stab the Lubricator back on
 - Energize the Stuffing Box
 - Close the Upper Master Valve
 - Close the SC-SSV
8. For a slick line rig-up, we are putting measures in place to mitigate the consequences of a primary barrier failure. Where should these measures be documented?
- In the job risk register
 - In the incident report
 - In the well file
 - In the daily morning operations report





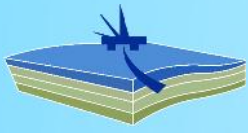
9. After re-perforating a live well on e-line, a gun has been pulled back to surface. Suddenly, the gun got stuck across the Xmas tree. The 'top' of the gun tool string is above the Dual Ram BOP. If the tool string cannot go up or down, what action should we take?
- Pull the weak point at the rope socket and rig up another set of Dual Ram BOP
 - Prepare to kill the well (no mechanical barrier left in this case)
 - Close the SC-SSV and perform an inflow test. Disconnect and pick up the lubricator and remove the perforating gun by mechanical force
 - Pressure up above the gun in an attempt to push the string back into the well
10. List precautions that should be in place when recovering a suspected 'hot' (unfired) gun at surface (THREE ANSWERS).
- Remove all non-essential personnel from the area
 - Stop at a safe depth and discuss all necessary precautions with essential personnel
 - Call the location manager for advice
 - Unit switched off and the key removed
 - Wire clamped and flagged
 - Grease injection head relaxed to avoid the tool string 'hanging up'
11. What is the principle reason for conducting a pressure test of a wireline lubricator package (include the BOP and riser) prior introducing well fluids?
- To verify integrity of the primary well control envelope
 - To comply with regulatory test requirements
 - To test the wireline BOPs
 - To verify integrity of Xmas Tree Valves
12. Whilst using braided e-line on a live well, the wire parts and is ejected from the well. What immediate action should you take?
- Close the Dual Ram BOPs. Bleed down the Lubricator.
 - Close in the Xmas Tree Upper Master Valve. Bleed down the Lubricator.
 - Pump up and energize the Grease Injection Head.
 - Contact production to report the incident.
13. While running deep into the well with a slick line drift tool, the wire parts at surface and the wire tail falls into the well. What would normally be the first intervention run prior any fishing operations?
- Blind box run to tag rope socket and release wire from tool string.
 - Wireline grab to locate and attempt to 'pick up' wire tail.
 - Wire-finder to locate top of wire.
 - Run with overshot to swallow rope socket fishing neck.





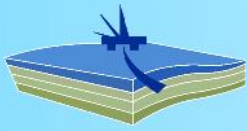
14. Which Xmas tree valves should be closed and tested before rigging up for a well intervention operation?
- a) Swab Valve and Upper Master Valve
 - b) Swab Valve and Upper Master Valve, Flow Wing Valve[s], Kill Wing Valve[s]
 - c) SC-SSV and Swab Valve
 - d) Wireline BOPs
15. A slick line tool string is stuck in the well. An attempt to jar free has been unsuccessful and the decision has been made to drop a cutter bar. The lubricator has been lifted and the cutter bar is inserted over the wire. What is the primary barrier now and how will it be verified?
- a) The Stuffing Box. This has been tested at the start of the operation and its integrity maintained by a continuously applied hydraulic pressure on the packing
 - b) The Dual Ram BOPs. These are closed. The upper ram is inflow tested, after which the lower ram is inflow tested with the equalizing port between the two rams in an open position.
 - c) The Xmas Tree Valves. These are inflow tested to provide a double barrier against any possible flow
 - d) The Wireline Riser. As it stills contains pressure an therefore providing a satisfactory verification of its own integrity.
16. When pulling out of hole after logging operation, the weight indicator starts acting sluggishly and unexpectedly starts to show increasing tension. What could have happened?
(TWO ANSWERS)
- a) A broken strand is making a bird nest inside the lubricator.
 - b) The wire is not properly lubricated.
 - c) The engine oil filter should be changed immediately.
 - d) The weight indicator showing the wrong tension.
 - e) Hydrates may be forming in the well or across pressure control equipment
17. What is the correct braided line ram configuration (from top to bottom)?
- a) Braided Inverted, Braided normal, Shear Seal
 - b) Braided Normal, Braided Inverted, Shear Seal
 - c) Braided Inverted, Shear Seal, Braided Normal
 - d) Shear Seal, Braided Normal, Braided Inverted





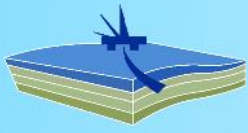
- 18.** We are running a memory gauge at the bottom of the hole and observe that the control pressure for the TR-SCSSV reads zero psi. What is the correct action to take?
- a) It is best to do nothing and check this out later
 - b) Re-establish control line pressure and pull out of hole, checking wireline for damage. Perform integrity test on TR-SCSSV before re-running memory gauge
 - c) Re-establish control line pressure and complete run with memory gauge
 - d) Re-establish control line pressure and pull out of hole. Run a Hold-Open Tool for TR-SCSSV and complete run with memory gauge
- 19.** Which of the following statements is true when pressure testing the wireline rig up with tool string installed in the lubricator?
- a) In order to get the Stuffing Box to seal properly, the pressure must be applied as fast as possible
 - b) The pressure is applied through a test port in the Stuffing Box
 - c) The pressure must be applied slowly to avoid pushing the rope socket into the underside of the Stuffing Box
 - d) An equipment set with a working pressure of 5,000 psi must always be tested to 5,000 psi, regardless of the SITHP
- 20.** We are running braided line in the hole at depth of 3,000 ft. The brass bushing and cable rubber in the grease head body are not functioning properly. It creates a problem on the hydraulic pack off unit which can no longer hold any pressure. What is the correct action to take?
- a) Stop the grease pump which energizes the pack-off
 - b) Close the Dual Ram BOPs
 - c) Increase the grease pressure
 - d) Close valves on Xmas Tree
- 21.** An accident occurs during a rig up of wireline PCE equipment on the well head. The lubricator has dropped from a height, resulting in minor damage on the ACME [male] pin end connection of this lubricator. However, the seal element of this quick union connection was still in good condition. Will you use this lubricator for the job in hand?
- a) Yes, because its pressure integrity is OK for this job.
 - b) No, it is needed to be repaired and re-certificated by OEM.





- 22.** The low and high pressure tests are normally performed on components that are exposed to well pressure. Which statement is true regarding this pressure test?
- a) If no visible leakage observed, it is OK and accepted.
 - b) The acceptance criteria shall be found in relevant documents such as well program, API, NORSOK or manufacturer recommendation.
 - c) Acceptance must be 10% of its integrity.
 - d) Acceptance must be 20% of its integrity.
 - e) Acceptance must be 5% of its integrity.
- 23.** During a maintenance check on wireline BOP, it was found that one of the Ram Assemblies had a seal that was swollen as a result of saturated oil from the well. What should be done?
- a) Fully redress the BOP and change out all seals
 - b) It is only necessary to replace the swollen seal
 - c) No need to change anything at this moment in time. The pressure test will tell you more conclusively if a change is necessary
 - d) Place the swollen seal in a 'cold' pack. This will allow the oil to come out and the seal can then be used again
- 24.** What is the best statement which describes what the Shear/Seal BOP can or cannot do?
- a) A Shear/Seal BOP should be able to cut the tool string at any point. If not, the tool string (BHA) should be made up such that a combination of lubricating or cutting can be done. The BOP should seal off the well.
 - b) The Shear/Seal BOP should be able to cut tool string at any point and seal off the well after cutting.
 - c) The Shear/Seal BOP should be able to cut tool string at any point





EXERCISE WIRE LINE EQUIPMENT-4

1.	c
2.	a
3.	b, d
4.	c, e, g
5.	c, e
6.	a
7.	c
8.	a
9.	b
10.	a, b, d
11.	a
12.	b
13.	c
14.	b
15.	b
16.	a, e
17.	b
18.	b
19.	c
20.	b
21.	b
22.	b
23.	a
24.	a

