

EXERCISE COILED TUBING EQUIPMENT 4

1. During a CT operation, the surface equipment leaks from the connection between the Quad BOP and the Stripper. Which barrier must be closed to make the well safe and allow the leak to be repaired?
 - a) Blind Ram
 - b) DHSV
 - c) Upper master valve
 - d) Pipe Ram

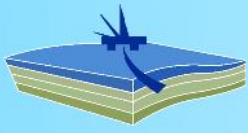
2. Which of the following statement is true?
 - a) The blind/shear or cutting ram is designed to cut the pipe and any BHA components.
 - b) The blind/shear or cutting ram is designed to cut the pipe only, not to cut the BHA.
 - c) The cutting action of the blind/shear or cutting ram is assisted by well bore pressure.
 - d) The blind/shear or cutting ram is operated with 5,000 psi hydraulic pressure.

3. When do we need to install an Annular Preventer?
 - a) When the stripper assembly is not available
 - b) When need extra security for high pressure operation
 - c) When need to seal around tools which have different ODs than the CT
 - d) When we strip the CT into the well under pressure

4. To deploy a BOP with 10,000 psi rated working pressure for the first time, we must conduct a 'body' test [also called 'shell test']. This doen at the manufacturer's plant. To which pressure would this body test be carried out?
 - a) 15,000 psi
 - b) 20,000 psi
 - c) 10,000 psi

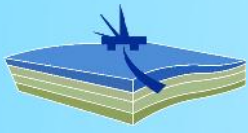
5. What is the best description of a CT deployment system?
 - a) It is the frame that supports the weight of the injector head
 - b) It is the action of feeding a long BHA through the injector head
 - c) It is mean of running a very long BHA into a live well
 - d) It supports the weight of the injector head and stripper when running coiled tubing on the floater





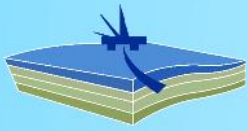
6. Coiled tubing is used for a reverse circulation operation in a live well by dropping a ball to open a circulation sub above the check valve. Which of the following statement is true when pulling out the coiled tubing?
- a) The coiled tubing can be pulled as long as the check valves were tested and are still holding pressure
 - b) While pulling out the CT and to maintain pressure in the coil, the valve on the reel will have to be closed
 - c) Continue with the reverse circulation to maintain adequate internal pressure control in the coil
 - d) While pulling out there will be no mechanical barriers at the bottom of the coil to prevent well bore fluids entering the coil
7. What gas is used to pre-charge the accumulator bottles used for the BOP Hydraulic Control System
- a) Nitrogen
 - b) Air
 - c) Oxygen
 - d) Carbon Dioxide
8. Why is a 'Flapper Type Check Valve' preferred over 'Ball and Seat Type of Check Valve' for most coiled tubing operations?
- a) Flapper Type Check Valves require less maintenance
 - b) Flapper Type Check Valves allow balls, plugs or darts to be pumped through them
 - c) Flapper Type Check Valves can withstand more pressure
 - d) Flapper Type Check Valves will close faster
9. How do we test the Pipe Ram of the Quad BOP?
- a) Pipe Rams must be tested from below using the kill wing connection
 - b) Pipe Rams must be tested by using the kill connection on the Quad BOP
 - c) Pipe Rams must be tested by pumping through the coil
 - d) Pipe Rams must be tested before rigging up with a 'straight bar'
10. What is the purpose of having a Check Valve installed in the CT BHA?
- a) It ensures that the coil will not collapse if exposed to high annular differential pressure
 - b) It ensures that pressure control can be maintained even if the CT fails at surface.
 - c) It ensures that BHA will not be exposed to any pressure.
 - d) It reduces the number of pressures test, because with a Check Valve it is no longer necessary to pressure test the CT itself.





- 11.** What are the main factors that have an effects on the fatigue life and therefore on the integrity of a coil? (THREE ANSWERS)
- The numbers of times the coiled tubing is run and pulled out
 - The BHP creating high pressure differentials across the coil
 - The radius of the gooseneck
 - The chain tension at the Injector
 - The bending cycles of the coil over gooseneck and reel
- 12.** What are the main advantages of a 'Combi' BOP over that of a 'Quad' BOP? (THREE ANSWERS)
- A Combi BOP reduces the height of stack
 - A Combi BOP creates more flexibility in the use of the stack
 - A Combi BOP minimizes the number steps to operate the BOP
 - A Combi BOP is easier to use
 - A Combi BOP is lighter in weight
- 13.** What is the Tertiary Barrier when we have a CT BOP Stack rigged up on a well on a high pressure well?
- Xmas Tree Valves
 - Shear and Blind Rams in a Quad or Combi BOP
 - Shear/Seal BOP [Safety Head]
 - Hydraulic Disconnect
- 14.** During coiled tubing operation, a leak is observed at the connection between Shear/Seal BOP and Xmas tree. What is the correct action?
- Close the Annular Preventer
 - Close the Swab Valve on the Xmas Tree
 - Close SC-SSV
 - Pick up about +/- 10 ft and shear the CT. Then close the Swab Valve
- 15.** While pulling the CT out of hole in a high pressure well, it is thought that we have a pinhole on the coil somewhere between surface and the BPVs. What is the best course of action?
- Continue pulling out at increased speed, regardless of the leak
 - Keep the string moving up and down to prevent it from getting stuck
 - Call the well supervisor or company man and agree on a meeting time.
 - Confirm BPVs are holding. Estimate leak point. Consider to kill the well.
 - Bleed down the internal pressure of coiled tubing to zero in safe manner, then continue pulling out.





10.	b
11.	a, c, d
12.	c
13.	c
14.	a
15.	a
16.	b
17.	a
18.	b
19.	a
20.	c
21a.	Conventional Stripper
21b.	Radial Stripper
21c.	Side Door Stripper

EXERCISE COILED TUBING EQUIPMENT-3

1.	b, c
2.	a
3.	a, b
4.	c
5.	e
6.	b
7.	a

EXERCISE COILED TUBING EQUIPMENT-4

1.	d
2.	b
3.	c
4.	a
5.	c
6.	d
7.	a
8.	b
9.	c
10.	b
11.	a, c, e
12.	a, c, d
13.	c
14.	d
15.	d

