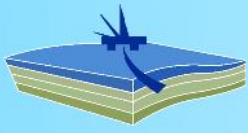


## EXERCISE COMPLETION OPERATIONS 3

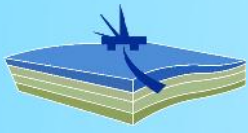
1. How to record a pressure gauge reading during pressure testing? (TWO ANSWERS)
  - a) Check the pressure gauge at the start and the end of the test
  - b) Frequently monitor the pressure gauges during the test
  - c) If there is no visible leak during test period, then its OK
  - d) Pressure recorder (stylus), is normally required to verify the test
  
2. Which of the following statements is correct if a completion well is planned to be killed by bull heading?
  - a) The kill pump & surface lines must be designed to resist the pressure equal to the maximum anticipated SIWHP
  - b) The kill pump & surface lines must be designed to resist the pressure equal to the maximum anticipated reservoir pressure
  - c) The kill pump & surface lines must be designed to resist the pressure equal to the maximum anticipated SIWHP plus a margin for friction
  - d) The kill pump & surface lines must be designed to resist the pressure equal to the maximum reservoir fracture pressure
  
3. What are benefits of holding pre-job meeting prior performing well control operations? (THREE ANSWERS)
  - a) To get to know each other
  - b) To agree in logistics
  - c) To discuss well control incident in details
  - d) To promote forward planning
  - e) To know roles and responsibilities of the individuals
  
4. What are reasons for using clear brine as a completion fluid in the completion well? (TWO ANSWERS)
  - a) To ensure we have compatibilty with the formation and formation fluids
  - b) To ensure we have hydrostatic pressure that is able to contain well pressure
  - c) To avoid formation debris settling above packer
  - d) To isolate pressure from the inner annulus and the completion tubing
  - e) To contain well pressure in case of packer or casing leaks





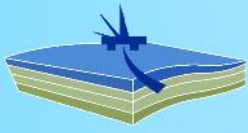
5. A live production well has sands and scales in the casing below several hundred feet of perforations. There is one low pressure loss (thief) zone. A work string is run inside the completion. Which of the following statements are true? (TWO ANSWERS)
- a) To stop the losses, it may be necessary to use a fluid with Loss Circulation Material [LCM], such as salt sized particles
  - b) The circulation system will need to allow pumping down the work string and the tubing to work string annulus must have sufficient flow to overcome losses
  - c) Reverse circulation is the best option with a thief zone in the well
  - d) A high pump rate will be required to overcome the thief zone
  - e) The thief zone may limit circulation rate that is necessary to obtain flow to surface
6. Which of the following statements best describes the principle of Lubricate and Bleed?
- a) Create a gradually rising overbalance with increasingly heavier fluid
  - b) Bleed off gas from tubing or annulus and after each bled off stage pump kill fluid down to compensate for the resultant decrease of hydrostatic head
  - c) Maintain constant circulation of heavy fluid down the annulus or tubing
  - d) Pump kill fluid down tubing or annulus in calculated volume steps and after each step bleed off gas to compensate for the resultant increase of hydrostatic head
7. Which of the following criteria determine the ability to bullhead? (TWO ANSWERS)
- a) The permeability of the formation
  - b) The position of the Blind Rams
  - c) The type of completion or tool string in the hole
  - d) The collapse pressure of the completion or tool string
  - e) The rated working pressure of the surface equipment
8. A closed gate valve has a pressure of 3,500 psi below and 0 psi above. Which of the following statements are true? (TWO ANSWERS)
- a) All gate valves are designed to open with pressure on one side only
  - b) High differential pressure assists a gate valve to opening more efficiently
  - c) A sudden pressure surge can damage other equipment downstream of the valve
  - d) Equalizing puppet in the gate valve ensures pressure is equalized across the gate valve as it opens
  - e) The mechanical force required to turn the handle can damage the valve stem





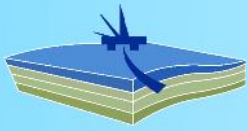
9. When shutting in the well at the Xmas tree, which of the following statements are true? (THREE ANSWERS)
- a) Upper Master Valve is normally used if there is nothing in the hole
  - b) Lower Master Valve is not normally used
  - c) Swab Valve shuts off all flow from the well
  - d) Upper Master Valve will seal around the wire
  - e) Damage to the valve can occur if it would be closed on tool strings
10. During slickline operations with the tool string at 1,000 ft, hydrate has formed at the Stuffing Box. What is the most likely reason for this to occur?
- a) No particular reason, because it is a well-known issue when running wireline
  - b) The Stuffing Box is leaking
  - c) We have residual water from pressure tests that has reached the Stuffing Box
  - d) The atmospheric [ambient] temperature is low
11. If the well head pressure is 150 psi, can we then use only one barrier when performing well intervention activities?
- a) Yes
  - b) No
12. After a well handover from production to well service operation an accident occurred during a well intervention activity. Who will take full responsibility?
- a) Production Supervisor
  - b) Well Intervention Supervisor
  - c) Both Production and Well Intervention Supervisor
13. The well was shut in on the BOP during a workover, and after for a while, the surface shut in pressure gradually increases. What are possible causes? (TWO ANSWERS)
- a) Gas migration
  - b) Production from an adjacent well
  - c) Injection from an adjacent well
  - d) There is an additional kick in the well bore





14. Which of the following statements is correct regarding Maximum Allowable Surface Pressure (MASP)? (TWO ANSWERS)
- a) It is the same for all wells in the same location
  - b) It has to be re-calculated if we encounter a change, e.g. corrosion
  - c) There is no need for re-calculation
  - d) It remains the same throughout the life of the well
  - e) During the life of the well, it will have to be regularly re-evaluated
15. During a work over operation it is known that the fluid hydrostatic pressure is just balancing formation pressure. A small amount of gas is swabbed in and the well shut in. The recorded shut in pressure is 0 psi. Then the gas is allowed to migrate but without expansion. Which of the following statements are correct when the gas bubble continues to migrate to surface? (THREE ANSWERS)
- a) The Gas Bubble Pressure will be half of Formation Pressure
  - b) The Gas Bubble Pressure remains the same but BHP will be approx. double
  - c) Gas Bubble Pressure will be the same as Bottom Hole Pressure
  - d) Surface Shut-in Pressure will be half of Bottom Hole Pressure
  - e) Surface Shut-in Pressure will be same as Gas Bubble Pressure
  - f) There is not enough information to determine the pressures





## EXERCISE COMPLETION OPERATIONS-2

1.	5309 strokes
2.1	11.0 ppg
2.2	5000 psi
3.	100 psi
4.	a, e, f
5.	Primary
6.	a, c, d, f
7.	Reverse Circulation
8.	b, d, e
9.	No
10.	b
11.	c, f
12.	Yes
13.	a
14.	c, e
15.	Yes

## EXERCISE COMPLETION OPERATIONS-3

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

