

Comprehensive Questions

Chapter 1

1. Summary main well type
2. The Objective of appraisal well
3. What is the difference purpose between evaluation well and appraisal?
4. Explain generalized drilling geology
5. Summaries the main contents of drilling geologic design for an exploration well.
6. Analysis advantages of deviated and multiple well
7. What are the purposes and main methods of geological logging?
8. Analysis the cutting logging features.
9. How to calculate the well depth during cutting logging?
10. Explain relay time. How to get relay time?
11. Coring type and principle
12. Explain mud circulation
13. Explain drilling fluid properties.
14. What are the basic functions of drilling fluid during drilling?
15. Explain the application of drilling –time curve
16. What are the advantages of formation Testing?
17. Explain the pressure card
18. Explain the Casing scheme
19. The purpose of well cementing
20. Well completion objective

Chapter 2

1. What are the main well logging methods to identify reservoir?
2. Sand will have _____ (high/low) resistivity comparing with the shale?
3. Oil have _____ (high/low) resistivity comparing with the water?
4. What's difference between sand and shale SP curve?
5. Were micrologs were developed to locate and define thin permeable beds?
6. What is one of the major use of the dipmeter?
7. Are the high gamma ray counts related to shale? How about low gamma ray counts?

8. Explain the features of clastic profile.
9. How to identify the clastic reservoirs with well logging curves?
10. How to identify the oil bed and water bed with movable water method?
11. Explain the features of gypsum and salt rock sections.
12. Summary the low resistivity reservoir features.
13. Analysis low resistivity reservoir genesis.
14. Analysis Sw-Swi crossplot and overlap plotting.
15. Carbonate Reservoir types.
16. Carbonate fracture reservoir geological logging features.
17. Carbonate conventional well logging features.
18. Carbonate fracture reservoir conventional well logging features
19. How to use FIL identify Fracture?
20. How to use LLD, LLS and Rxo identify Fracture?

Chapter 3

1. What's the main stratigraphic division units for a field wide?
2. Explain the definition of rock stratigraphic unit?
3. What's the characteristics of rock stratigraphic unit?
4. What features of index fossil have?
5. Explain the sequence stratigraphy unit?
6. What is the basis of formation correction?
7. Explain the scope of stratigraphic correlation.
8. Sum the main formation method in an oil field.
9. Analysis the features of marker bed.
10. What are common logging curves to be used correction?
11. Explain the type well or standard well.
12. Describe the correlation procedures
13. How to select correlation sections?
14. What are factors to influence the SP curve?
15. Draw the SP curve morphology of point bar and debouch bar, and explain their sedimentary features.
16. Oil bed correction
17. How to define oil bed correction unit?
18. Analysis the features of single oil method
19. Explain the cycle-thickness correlation method
20. What kind figures for reservoir characteristic research?

Chapter 4

1. The significance of subsurface structure research.
2. What are the basic features of subsurface structure?
3. What are the research range and mapping units for the exploration phase subsurface structure research?

4. What are the research range and mapping units for the development phase structure research?
5. Summary the research information for an oil field subsurface structure.
6. How to identify fault with the stratigraphic sequence abnormal?
7. How to identify reversed fault and inverted anticline according to sequence repetition order?
8. What is the difference between the sequence missing from fault and unconformity erosion?
9. What information could be inferred fault during drilling?
10. How to plot fault line?
11. Summary the features of contemporaneous fault.
12. Explain growth index
13. Analyses fault seal research main methods
14. Section lines selection principle
15. Well site correction methods
16. Mapping marker selection principle
17. Mapping methods of structure contour map of oil and gas fields
18. Summary the paleostructure features
19. Paleostructure research methods
20. Sedimentary compensation

Chapter 5

1. Fluidstatic pressure
2. Hydrostatic pressure gradient
3. Overburden pressure and related equation
4. How to get the initial pressure?
5. Application of isobaric map
6. Current reservoir pressure
7. Drawdown pressure
8. Initial pressure distribution features in the reservoir
9. How does the density influence the initial pressure at the same depth?
10. Reduced pressure
11. How to predict O/W with initial pressure?
12. Pressure Coefficient
13. Summary the main geological settings of overpressure
14. Basic characteristics of physical, drilling and well logging in an overpressure interval
15. Overpressure prediction with log parameters

16. Pressure calculation methods----empirical curve, equivalent depth
17. Why we should be special care while drilling through abnormal pressure regimes?
18. Geothermal gradient
19. Formation temperature measurement method
20. The influencing factors of formation temperature distribution