

## Overview of the Petroleum Industry - Test # 6

Please turn test in on Friday, April 7 at the end of class

Name \_\_\_\_\_

Textbook – The Oil and Gas Industry, A Nontechnical Guide

***Please write your answers on this page***

Please read Chap 9 (Transporting Gas) and Chap 10 (LNG)

1. Draw natural gas value chain. Fig 9-1. Pg. 157
  
2. True or False. After gas wells are compressors then gas plant, then separator. Fig 9-2, pg. 158
3. True or False. NGL is natural gas liquids – ethane, propane, butane, pentane. Pg. 158
4. True or False. LDCs are local distribution companies, such as utility companies. Pg. 158, 159
5. True or False. The BTU content of a gas stream is higher if NGLs are left in the gas. Pg. 158
6. True or False. Gas pipelines are 20-42 inches in diameter and operate at 200-1500psi. Pg. 162
7. True or False. Pumps are located every 50-100 miles to maintain gas line pressure. Pg. 164
8. True or False. Because of friction, gas pressure declines with distance. Pg. 164
9. Describe the 3 types of engine compressor systems for gas. Pg. 164
  
10. List 5 types of gas meters. Pg. 166-167
  
11. True or False. Gas can be stored in underground domes. Pg. 168-169
12. True or False. Much of the maintenance and repair tasks are the same for gas lines as for oil pipelines. Pg. 170
13. List 6 actions to maintain gas pipeline integrity. Pg. 170-171

14. How is “odorization” used to detect gas leaks. Pg. 176-177

15. Define corrosion and its contributing factors. Pg. 177

16. Describe LNG process. Second paragraph, Background, pg. 179

17. Draw LNG value chain. Fig 10-1, pg. 180

18. Define sweetening and dehydration. Pg. 182

19. Draw a full containment LNG storage tank and label it. Fig 10-3, pg. 184

20. Describe the requirements of LNG tanker ship cargo tanks, pg. 187

Max test score is 100 points. Each question is 5 points