

## Overview of the Petroleum Industry - Test # 6

Please turn test in on Thursday, March 29 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

21. List what components are in natural gas when it comes out of the well

Each question is 5 points