

Across

- **3.** cfs/1.55
- **5.** The impeller housing of a centrifugal pump
- 7. Closing the discharge valve on a positive displacement pump would cause motor the amperage to
- **8.** A ball forced through a sewer line.
- 13. Shoring must protude inches above the top of the excavation.
- **15.** The minimum scouring velocity normally used for sanitary collection lines is ____ f/s.
- 17. Hydrogen sulfide gas smells like ____.
- **18.** A sewer _____to a water line, must have a

minimum of	10	feet	of
separation.			

- **20.** A Parshall flume is a type of
- **21.** Spacer ring in a pump packing gland to improve seal water distribution is a _____ ring.
- **22.** A device used to test the percent deflection in a sewer pipe between manholes is known as what?
- 23. Leakage of seal water around the packing on a centrifugal pump is required because it acts as a(n) _____?
- **24.** 26,928 gallons per hour of flow is equal to 1

Down

- **1.** Shoring is required for any trench over _____feet deep.
- **2.** The flushing water pressure in a water-lubricated wastewater pump should be

PSI more than the pump discharge pressure.

- **3.** 5,280 feet
- **4.** To sample for pH, you should collect a sample.
- **6.** Who must review plants for final approval before a new sewer can be constructed?

- 7. Liners are installed in sewers to correct problems caused by
- **9.** Closing the discharge valve on a centrifugal pump would cause motor the amperage to
- **10.** amps x volts
- 11. rise/run
- **12.** A PH of 7 is _____
- **14.** A(n) is required for any CSO outfall pipe.
- **16.** What must be done before any work is to be done on a piece of equipment?
- **19.** A PH of 6.0 is