A Plume of Contamination Activity Sheet

Instructions:

1. Using pH paper, determine the pH of tap water.
   
   pH of tap water ________________________________

2. Take a sample of sand and “groundwater” from each test well location indicated. Test the groundwater at each location for contamination by placing the sand sample on a strip of pH paper. Rinse the straw after each sample.

3. Record your results for each location on the table below:
   + = contamination found (pH of sample < water)
   – = no contamination (pH of sample = water)

   Record the results directly on each test well location.
4. Based on the results of your tests, sketch the shape of the plume of contamination.

5. Are there enough “test wells” to determine the source of contamination? ______________________________________________________________________

6. If you were to select three additional “test well” locations, where would they be? Indicate your proposed locations with the letter “T” on the activity sheet.

7. Rinse the straws with tap water and test the groundwater at each new test well location. Record your results. If the results show contamination, mark the well with a T+. If the results show no contamination, label the well T-.

8. Are more test wells needed to show the extent of the plume of contamination? ______________________________________________________________________