**Key Insights: Water Portability Analysis**

1. **pH Level**:  
   Most water samples fall within the safe pH range (6.5 to 8.5), but some are either too acidic or too basic.
2. **Turbidity**:  
   Several samples have **high turbidity** (above 5), which may indicate poor water clarity and potential contamination.
3. **Potability**:  
   A large portion of the water samples are **not potable (not safe to drink)** based on the given parameters.
4. **High Turbidity vs. Potability**:  
   Most **high turbidity** samples are linked with **non-potable** water, showing a possible relationship.
5. **Safe vs. Unsafe pH**:  
   Water with pH outside the safe range tends to be **non-potable**, suggesting pH is a strong quality factor.
6. **Other Factors (Solids, Sulfate, Conductivity)**:  
   Non potable water generally shows **higher values** for these elements, which could affect health and safety.
7. **Turbidity Level Column** helped classify water into **“High” or “Low” clarity**, making filtering and analysis easier.