



**Water Recreation Program**  
 1101 West College Avenue  
 Spokane, WA 99201-2095  
 509.324.1560 ext. 4

[www.srhd.org](http://www.srhd.org)

## Hints for Testing Pool Water...

- Follow your kit's directions.
- Begin each season with fresh test chemicals.
- Rinse test vials thoroughly before taking a water sample.
- Take your water sample as deep as you can reach and far away from a disinfection inlet or source.
- Avoid touching test tablets with your fingers.
- Use a lid (not your thumb) when inverting tube.
- Use a white background and adequate light source when reading results.
- Store your kit in a cool, dry location. Do not keep your test kit close to any pool chemicals.



## Potential Problems

### Free Chlorine too low:

- ♦ risk of transmitting infections & diseases
- ♦ risk of algae growth

### Free Chlorine too high:

- ♦ uneconomical use of disinfectant
- ♦ bleaching of hair and swimsuits

### Combined Chlorine too high:

- ♦ irritates bathers' eyes and mucous membranes
- ♦ causes strong "chlorine" odor

### pH too low:

- ♦ pits concrete, wrinkles vinyl liners, corrodes equipment
- ♦ metal stains may appear
- ♦ promotes chlorine loss
- ♦ irritates bathers' skin and eyes

### pH too high:

- ♦ crusty deposits may form on contact surfaces
- ♦ may contribute to cloudy water
- ♦ poor chlorine disinfection
- ♦ irritates bathers' skin and eyes



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## Chlorine: Free, Combined, Total... What Does It Mean?

- FREE CHLORINE** – When chlorine is first added to your pool or spa, it is available as free chlorine which acts as a disinfectant.
- COMBINED CHLORINE** – When the free chlorine attacks germs and dirt in your pool or spa, it becomes combined chlorine and is no longer available as a disinfectant.
- TOTAL CHLORINE** – Free chlorine plus combined chlorine.

### 1. Test for free chlorine.

You are measuring the amount of chlorine that is available to act as a disinfectant.

### 2. Test for total chlorine.

You are measuring free chlorine plus combined chlorine.

### 3. Calculate combined chlorine.

Subtract free chlorine from total chlorine.

**Total – Free = Combined**

### Chlorine level is good.

If the total chlorine is equal to or slightly higher than the free chlorine (**SAMPLE 1 AND 2**), most of the chlorine in your pool is available to disinfect the water.

### Time to drain or shock.

If the combined chlorine is greater than half of the free chlorine (**SAMPLE 3**), then there is not enough chlorine available to disinfect the water, and it is time to drain or shock the pool.

#### SAMPLE 1:



#### SAMPLE 2:



#### SAMPLE 3:

