

## **SALT WATER WELLS**

Sodium Chloride is a compound, therefore either the sodium or the chloride must be tested individually. If the well is in a known salt water area or concerns are raised about a salt water well, the water should be tested for chloride. If a person is concerned about the amount of salt in their diet, the water should be tested for sodium.

Chloride in drinking water is generally not harmful to humans until a high concentration is reached. Restrictions on chloride are generally based on palatability requirements rather than on health standards. Water containing less than 150ppm of chloride is satisfactory for most purposes. A chloride content of more than 250 ppm is generally objectionable for municipal water supply. Water containing more than 350 ppm is objectionable for most irrigation or industrial uses. Water containing as much as 500 ppm of chloride frequently has a disagreeable taste. Animals can drink water with much greater chloride contents than these. Some authorities suggest that water containing as much as 3,000 to 4,000ppm chloride is satisfactory for consumption by cattle.

Assuming that the average person ingests about 5,000 mg of sodium in food and consumes about 2.2 liters of water per day, persons on a 500 mg sodium per day diet should not consume water that contains more than 20 mg per liter. The 440 mg is derived from food and the 60 mg from water used for coffee, tea, food preparation and drinking. If sodium is restricted to 1,000 mg per day, the upper limit for total sodium concentration of water is about 200 mg or approximately 66 mg per liter.

Reference: Journal of Environmental Health 1981

**Ground Water and Wells**