

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s)
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Project Title

Mission Impotable

Abstract

Objectives

The purpose of my investigation is to determine which filter will have the greatest effect on non-potable water that was collected from around the San Joaquin valley.

Methods

I will be using an activated carbon granule filter, and my homemade carbon filter to determine which of these works best on non-potable water found in the valley. I will be using bottled water as my control water and San Joaquin river water, and tap water.

Results

The results of my investigation on different filter types were that the store bought filter had a greater effect than my homemade filter. Although the tap water (Filter A) didn't get the best results, it did have the greatest improvement.

Conclusions

After completing my investigation on both, different filters and different types of water, I found that the store bought carbon filter worked best on the tap water rather than the river water. My hypothesis stated that the store bought filter would work best, and my data shows that my hypothesis was correct. The water with the best quality besides the bottled water, was the tap water that was filtered using the store bought carbon filter. The TDS for the bottled water (total dissolved solids) came out to be 17.8 ppm (parts per million) which was the same average as the river water.

Summary Statement

Filters can be designed to make water potable.

Help Received

Robert Nelson, Jewely Lickey