

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

S0702

Project Title

Water Pollution Levels at Our Local Beaches

Abstract

Objectives/Goals

Our objective was to conduct an experiment that had to do with our local beaches. We decided to do a project on the ocean water. Our goal was to figure out what area in Ventura had the highest pollution level.

Methods/Materials

We did a few different tests on our water samples. The tests were the Alkalinity test, Iron test, and The Wide Range (Ph) test. The materials that we used were water bottles, plastic containers, water samples from various beach loactions. Test kits included: Phenolphthalein Tablets, CG-MR Indicator Tablets, Alakalinity Titration Tube, Direct Reading Titration, Octet Comparator, Wide Range Indicator, Iron Reagent #1 and #2, Spoon .05g, Test Tube, and an Iron Comparator.

Results

During this experiment we found that the Ventura River Mouth was the most polluted based on the Wide Range pH level and The Iron level. Suprisingly, Solimar was the least polluted based on the wide range pH and The Iron levels. While testing we found that the sample water had a zero percent of alkalinity. When we were testing the Wide Range pH level and The Iron level the water samples were very similar to each other.

Conclusions/Discussion

We chose water samples from Surfers Point, Solimar, River Mouth, The Pier, and Harbor Cove. Surfers Point, Solimar, The Pier, and Harbor Cove all had a 0.5 level of Iron. The River Mouth had an Iron level of 1. All of the samples had a level of zero for the Alkalinity Test. The River Mouth and The Pier had a 9.5 Wide Range Ph level. Surfers Point had a 9 and The Harbor Cove had a 8.5. The lowest was Solimar. We concluded that The Ventura River Mouth was the most polluted.

Summary Statement

Our project is about the different water pollution levels at our local and favorite beaches.

Help Received

We used a water testing kit, which we got from our chemistry class.